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THE JOURNAL OF  
HELLENIC STUDIES



# THE JOURNAL OF HELLENIC STUDIES

VOLUME LX

1940



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J. H. S.

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## MEETINGS

## OF THE SESSION 1939-40

1 At the Inaugural Meeting of the session, held on 30th November, 1939, in association with the Cambridge University Classical Society, in the old Music Room, St. John's College, Cambridge, Prof. F. M. Cornford read a paper on 'A Ritual Basis for Hesiod's Theogony.' He contended that the Theogony is not 'a genealogy interrupted by episodes,' as Mazon describes it, without connection or a common origin. It consists of (1) a semi-philosophic cosmogony (116-32), from which mythical traits have been almost completely expurgated, and (2) A Hymn to Zeus, which is also a Myth of Creation, interrupted by genealogies and some interpolations. The cosmogony is of the same pattern as Genesis I and the Milesian systems. These are all late rationalisations of a very old creation myth. The opening of the Gap (Chaos) between heaven and earth reappears in Hesiod's myth as the forcing apart of Ouranos and Gaia by Cronos [Lang, *Custom and Myth* (1884), 45; Frazer, *Adonis* (1914) i, 283; Nilsson, *History of Greek Religion* (1925), 73]. The later formation of the heavenly bodies by separation from the earth rationalises the making of sky and earth out of the split body of the Dragon of the Waters, Rahab-Leviathan, slain by Yahweh, or Tiamat, slain by Marduk [Frazer, *The Dying God* (1911), 105]. Hesiod's Zeus slays Typhaon-Typhœus. The oriental evidence shows that the Dragon-slaying reflects one of a sequence of ritual acts performed by the King, impersonating the God, at the New Year Festival (Tabernacles). Other features were the procession and enthronement of the King-God, fertility magic, defeat of the King's enemies in another ritual combat (Titanomachy), and a sacred marriage. The essential purpose of the New Year festival is the renovation or re-creation of the natural and social order (Sedek, *Dike and Themis*) and of the people's life in and by the divine king, who defeats the powers of darkness and death and secures fertility for the coming year [*Myth and Ritual*, ed. S. H. Hooke; Hooke, *Origins of Early Semitic Ritual*, 1935]. The Creation Myth is the

aetiologial transcript of this ritual (itself the root of the whole matter), projecting the action on to the superhuman plane as the story of the original creation of the world order and of life. Detached from the ritual drama which it long survives, the myth becomes grotesque and unintelligible, and the episodes suffer dislocation. But in Hesiod's Hymn to Zeus, recounting how Zeus became King of the Gods and apportioned them their provinces in the cosmos, the incidents, though blurred, are recognisably parallel to the exploits of Marduk in the Babylonian Hymn (miscalled 'Epic') of Creation.

After observations by the President a vote of thanks was proposed by Prof. A. B. Cook and seconded by Mr. W. K. C. Guthrie.

The Second General Meeting was held on 2 19th January, 1940, in the Ashmolean Museum, Oxford, where Prof. J. D. Beazley read a paper, illustrated by lantern slides, on 'A Marble Lamp,' published on pp. 22 ff. of the present volume. In the absence of the President, Prof. J. L. Myres, ex-President, occupied the Chair. A vote of thanks was proposed by Prof. Gilbert Murray, and approved with acclamation by the large audience, which included members of the Oxford Philological Society.

At the Third General Meeting, held at Burlington House on 7th May, 1940, Prof. Bernard Ashmole gave an account, with slide illustrations, of 'An Early Attic Epiphany.' He described an Athenian cup of the second quarter of the sixth century B.C., from Rhodes, in the British Museum, with a scene in black figure on each side: not a masterpiece, but attractive from its lively action.

One of the scenes, a ploughman and a sower, had become, rightly, a stock illustration of early agriculture: but neither it nor its companion had been fully understood. The other picture was of a sacrifice. Yet the procession before an altar was approaching, not the altar itself, but a woman standing beside it with a basket in her hands. The procession consisted of the leader, a priestess, one of whose hands was raised in a gesture of revelation; her other

wrist was held by the first of a file of four women, hand in hand, just coming to a halt, probably in a religious dance: a boy, still running, came last. On the left of this scene was one of the two clues to the explanation of the whole picture—a woman seated on a stool in an attitude of grief: Demeter. The second clue was the basket already mentioned, carried by the woman at the other end of the picture, perhaps Persephone: that basket was certainly a *liknon*, from which corn-stalks could be seen hanging, and within it fruits or cakes, and probably a phallus. This, then, was a religious ceremony, celebrated by women in honour of Demeter, at which a revelation of sacred symbols was made. Perhaps it was the original institution of the rite. From among the Attic festivals possible, it was most likely to be some stage of the Thesmophoria, probably the Kalligeneia, devoted to human fertility. This would explain the presence of the boy, to which there were later analogies: and the relief of the Agraulides (also fertility goddesses) on the Acropolis, offered a parallel not far off in date.

Forming the pendant to such a scene, that on the other side might well be an act which, though primarily utilitarian, had to be performed on certain occasions with religious solemnity. The *ἱερός ἀγρός* at once came to mind: and the ploughman would be *Bouzyges*, the sower Epimenides or Triptolemos. This hypothesis was supported by the ancient calendar-relief built into the church of Hagios Eleutherios at Athens: there a ploughman and a sower were shown carrying out this ceremony in the month of Maimakterion. In the same relief the last figure of the month before stood for the Thesmophoria.

The importance of the cup lay in its bearing the earliest representation of one of the *ἱεροὶ ἀγροί*: in its bearing the earliest representation of part of the Thesmophoria (perhaps the Kalligeneia) with the epiphany of Demeter and Persephone; and the earliest instance of the exposure of the sacred emblems in the *liknon*, afterwards to become one of the main features of Dionysiac ritual.

A vote of thanks was proposed by the Chairman and unanimously seconded by the audience.

- 4 The Annual Meeting of the Society was held on 23th June, 1940, the President, Sir Richard Livingstone, occupying the Chair. In moving the adoption of the Annual Report, the President observed that most of it read much as Reports had read in ordinary years. The audience would hardly guess from it that we were carrying on our activities during the

greatest war in history. It was not a wholly new experience, for in the Annual Report for 1917 it was recorded that in the absence on active service of Capt. E. J. Forsdyke, Mr. G. F. Hill took over responsibility for the *Journal*, and that the Secretary had collected 12,000 field-glasses for the army. Our interests seemed of small account in these earth-shaking storms. '*Simul atque increpuit suspicio tumultus artes ilico nostrae contiscunt.*' But when the storm was over that silence would be broken and their voice heard again. Incredible as it might seem to-day, Greek studies would outlive dictators and their wars. European civilisation could never let those studies die, nor indeed would they die with the death of that civilisation. For ancient Greece was part—*pars magna*—of the spiritual life of man. It was also a heritage which all Europe shared, and which united the countries now so tragically divided. The more important to maintain its study when so many other bonds were broken and when material needs necessarily and properly filled the horizon.

In this connexion he wished to express particular gratitude for the way in which members of the Society had responded to our appeal for continued support—in the spirit of a letter from an American subscriber from which the following words were taken:

'I have instructed the National City Bank of New York to send to the Honorary Treasurer of the Society the equivalent of ten dollars in pounds sterling as my contribution for the current year.

'If a deficit appears inevitable toward the end of this year I should be happy to make some special contribution toward wiping it out. The Hellenic Society ought to come out of this war, at least with no deficit.'

That was the right spirit.

The motion was seconded by Dr. Pickard-Cambridge, who thanked the President for his wise and encouraging words, and, on being put to the meeting, was carried unanimously. The motion for the re-election of the Vice-Presidents, and the election of ten new members of the Council as detailed in the Annual Report, was moved by Sir John Forsdyke and seconded by Mr. S. Chapman. It was carried unanimously. The motion for the election as auditor of Mr. C. T. Edge to succeed Mr. Clay, who has retired, and the re-election of Mr. W. E. F. Macmillan, was proposed by Mr. Chapman and seconded by Mr. L. C. Wharton. It was carried unanimously.

Sir Richard Livingstone then delivered his Presidential Address on 'The Contemporary Interest of the *Supplices* of Aeschylus,' the more topical part of which has since appeared in the *Hibbert Journal* for October, 1940. He observed that some recent interpretations of the *Supplices* show either the critic's idiosyncrasies or the influence of the fashion of the moment (e.g., anthropology or, more recently, Marxism). The underlying idea of the Trilogy is a compromise between conflicting claims (as in the *Prometheus* Trilogy and the *Oresteia*). The extant play treats *sub specie aeternitatis* a practical problem of real politics—the appeal of helpless people for assistance against tyrannous *Hubris*. The *ecclesia* (like ourselves) was familiar with such appeals, and the request for help to Ionia made by Aristagoras in 498 B.C. must have been in the minds of the audience if the play is to be dated about 496. The grounds of his appeal, racial sympathy, justice, pity, religion, the

interests of the State, are those on which the Suppliants ask for help; and they are also familiar to the modern world. So are the hesitations of Pelasgus; he and the Argive people in the play are sketches from contemporary democracy. The final decision of the Argives to intervene is based on religion and humanity. The play, primitive as it is, embodies three great Greek ideals—a sense of the rights of the weak, hatred of *Hubris*, and the belief that life, even in foreign relations, should be ruled by reason and not by force—ideals as living and as uncommon to-day as when Aeschylus wrote.

A vote of thanks to the President was proposed by Prof. Dawkins, who said that the moving address just delivered showed that the Society represented no trivial form of escapism in the midst of great events, but on the other hand helped us to understand them. This was seconded with acclamation.



# The Society for the Promotion of Hellenic Studies

BALANCE SHEET, DECEMBER 31, 1940.

<i>Liabilities.</i>			<i>Assets.</i>		
	£	s. d.		£	s. d.
To Debts Payable .....			By Cash in Hand—Bank .....	396	19 7
„ Subscriptions paid in advance.....	409	16 1	Assistant Treasurer .....	23	2 8
„ Endowment Fund .....	30	9 0	Petty Cash .....	37	2 2½
(includes legacy of £180 from the	2039	12 0	Deposit Account .....	300	0 0
late Prof. P. Gardner, £200 from				757	4 5½
the late Canon Adam Farrar,			„ Debts Receivable .....	98	17 5
£200 from the late Rev. H. F.			„ Investments .....	2725	0 0
Tozer, and £500 from the late			„ Library Premises Capital Account—		
Mr. G. A. Macmillan)			Amount spent to date .....	5584	13 10
„ Life Compositions—			Less Donations received .....	4099	11 4
Total at Jan. 1, 1940.....	2157	15 0		885	2 6
Received during year .....	25	4 0	Transferred to Income and Expendi-	658	0 0
	2182	19 0	ture Account during past years .....		
Less carried to Income and Expendi-				227	2 6
ture Account—Members deceased ...	26	5 0	Now transferred.....	23	0 0
Surplus at January 1, 1940 .....	996	17 8	„ Valuation of Stocks of Publications .....	204	2 6
Add Balance from Income and Ex-			„ „ Library .....	300	0 0
penditure Account.....	308	9 3½	„ Photographic Department .....	1500	0 0
Surplus at December 31, 1940 .....	1305	6 11½	„ Paper in hand for printing Journal .....	200	0 0
				156	13 8
				£5941	18 0½

Examined and found correct. (Signed) CYRIL T. EDGE.

# The Society for the Promotion of Hellenic Studies

INCOME AND EXPENDITURE ACCOUNT. FROM JANUARY 1, 1940, TO DECEMBER 31, 1940.

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Dr.	£	s.	d.
To Printings, Paper, and Plates. Vol. LX.....	230	5	4
" Drawing and Engraving .....	55	16	5
" Editing and Reviews.....	12	5	0
	<hr/>		
	£397	6	9

	£	s.	d.
By Sales, including back Vols. Per Macmillan & Co., Ltd. ....	7	11	9
" Hellenic Society .....	15	0	3
	<hr/>		
" Receipts from Advertisements .....	22	12	0
Balance to Income and Expenditure Account ...	18	12	6
	266	2	3
	<hr/>		
	£397	6	9

LANTERN SLIDES AND PHOTOGRAPHS ACCOUNT.		FROM JANUARY 1, 1940, TO DECEMBER 31, 1940.	
	£	s.	d.
To Slides and Photographs for Sale .....	8	14	1
" Slides for Hire .....	4	14	4
Balance to Income and Expenditure Account .....	16	18	10
	<u>£30</u>	<u>7</u>	<u>3</u>

LIBRARY ACCOUNT. PURCHASES AND BINDING.	
	£ s. d.
To Purchases .....	19 14 4
" Binding .....	22 11 3
(Cost of printing Accessions Lists to the Library and Slides Departments, less contribution from the Roman Society .....	13 15 7
	<hr/> £56 1 2 <hr/>

LIBRARY PREMISES ACCOUNT FOR THE YEAR 1940.	
	£ s. d.
Rent .....	40 2 12 6
Rates .....	7 5 9
Transferred from Balance Sheet—Proportion of Expenditure for Year .....	23 0 0
	<u>£432 18 3</u>
Contributions by the B.S.A. and B.S.R. ....	£ s. d.
London Association of Certified Accountants .....	20 0 0
Balance to Income and Expenditure Account .....	65 17 10
	<u>347 0 5</u>
	<u>£432 18 3</u>

ΑΓΓΛΟΙ ΕΛΛΗΣΙ ΧΑΙΡΕΙΝ

οὐ Μαραθωνομάχας σέβομεν μόνον, ἀλλὰ καὶ ὑμᾶς,  
ὦ φίλοι, οὐ τοίων χειροτέρους πατέρων.

## THE EXCAVATIONS AT AL MINA, SUEIDIA

### IV. THE EARLY GREEK VASES

[PLATES I-IV.]

THE material published here is the Greek pottery from levels 5 to 9.<sup>1</sup> This falls into two groups: that from levels 5 to 7 and that from levels 8 and 9. Within these groups there was evidently much disturbance, and bits of the same vase are frequently found in several levels. Even between the two main groups such overlaps occur, and there are pieces which, though they do not join fragments in the other group, seem out of context; but in the main the division between levels 7 and 8 seems significant, and I have treated the two groups separately while merely recording differences of level within them. Pl. I, *m* and *n* come from level 4 with Attic red-figure pottery, which is plainly an accident. I am only able to publish a small proportion of the pottery, and have tried to combine a general conspectus of the material with the reproduction of most of the outstanding pieces. For some classes—*e.g.*, black Ionian cups and jugs, and to a great extent bird-bowls and the like—I have relied on references to identical material published elsewhere.

#### *Levels 8 and 9*

The earliest in type of the Greek vases from Al Mina are fragments of about a dozen cups with concentric semicircles dependent from the rim (Fig. 1, *a* to *k*). They are in dull pink clay, generally with a yellow or cream slip, sometimes carelessly applied.<sup>2</sup> The colour is generally streaky. The style is Protogeometric in origin, but the objects are not of Protogeometric date. Concentric semicircles and to a great extent concentric circles disappear from full Geometric on the mainland, but in the Cyclades and East Greece this is not so.<sup>3</sup> Cups like ours have been found in large quantity on Delos,<sup>4</sup> and there are examples from Rhodes, one in a tomb with jugs of purely Geometric character.<sup>5</sup> Several have been found on Tenos, with other vases of different shapes but the same character, in a Geometric cemetery,<sup>6</sup> and there is a group of such vases, including two like

<sup>1</sup> There was a little pottery from level 10, but it was not brought to London, and I have not seen it. I understand that it did not differ strongly in character from that of levels 8 and 9.

<sup>2</sup> Fig. 1, *h* irregular unslipped patch under the handle; *e* and *l* unslipped.

<sup>3</sup> *E.g.*, CR III, 101, VI-VII, 119 ff.; *Délos* XV, pls. 6, 7, 15, 26. The wavy line (Fig. 2, *m*) is in like case.

<sup>4</sup> *Délos* XV, Pl. 26, *Skyphoi géométriques des Cyclades, Groupe Ae*, 4-19.

<sup>5</sup> CR VI-VII, 189 ff., T. 80. There are also three fragments from Vroulia (Kinch, 132, Pl. 17, 5). All other material from that site is post-Geometric, and little of it earlier than the middle of the seventh century.

<sup>6</sup> *Annuario* VIII-IX, 203-34.



FIG. 1.—POTTERY FROM LEVELS 8 AND 9. Scale, 2 : 3.

ours, in the Vatican from 'Tine.'<sup>7</sup> This is interpreted by Albizzati as Tineh in Egypt, but by Buschor far more plausibly as Tenos.<sup>8</sup> Buschor suggests that Tenos was the centre of manufacture of this 'sub-Protogeometric' pottery. This may well be, though the localisation of stylistic subdivisions in the Cycladic and East Greek koinai requires a cautious approach.

Very similar in fabric to these is the cup, Fig. 1, *q*: pinkish clay, grey at the centre through bad firing, and a yellow slip applied outside only. Cups of this type are found in Attic, Cycladic, and East Greek Geometric. Ours belongs to one of the latter fabrics. The cup, Fig. 1, *l*, is of convincingly early appearance. The heavy fabric and the wide black areas which enclose the meander in a reserved panel contribute to this effect. The clay is dark brown and coarse, the black rather metallic. It is unlike anything else from Al Mina. A more normal meander piece is Fig. 1, *m*; pink clay, white slip. This is Cycladic;<sup>9</sup> there are other fragments of the same type from the site. Of the same class are Fig. 1, *n*, *o*, *p*. The bird and dot rosette on the first are related to those on the kantharoi and tall-rimmed cups, Figs. 2, *a* and *o-q*, and 3, *f*. These show fine Cycladic work of the period, with some Attic influence.<sup>10</sup> Fig. 2, *o* and *p*, indeed, might conceivably be Attic, but is more probably a Cycladic copy of an Attic cup.<sup>11</sup> It is in rather dark pink clay, unslipped; the rest in similar clay but with white slips. The concentric circles and false spirals are typical and recur on other shapes: kraters, Fig. 2, *f* and *s*; oenochoe neck, Fig. 2, *b*; lid, Fig. 2, *g*; all white slipped, the lid only partially. For the krater, Fig. 2, *f*, with false spiral and animals, cf. an example from Delos.<sup>12</sup> The joining lines of the false spiral on our fragment are straight; on the Delos krater they are beginning to be S-shaped, and in the smaller friezes the circles are solid. The next stage is shown by our krater, Fig. 3, *d* and *e*, where the blobs are vertically elongated and the S shape is more pronounced. Elongation is a tendency in late Geometric: the blobs of the lid, Fig. 2, *g*, and the krater, Fig. 3, *a*, become bars on the rim of the kantharos, Fig. 3, *k*, while the bar surrounded by dots under the tail of the bird on Fig. 3, *m* is the corruption of a dot rosette or a pair of dot rosettes. The same phenomenon is found in Attic.<sup>13</sup> However, though elongation is typologically later, it can hardly be regarded as a sound chronological criterion. The twin of Fig. 3, *d* and *e* was found at the Samian Heraeum.<sup>14</sup> It is classed by Eilmann, no doubt rightly, as 'not Samian.' I take them to be a late phase of some Cycladic Geometric. They are in a brown clay, with no slip. Another Cycladic krater related to those in Delos is our Fig. 2, *h-k*; dark red clay, white slip; one fragment from level 6. The extraordinary and very ineffective stylisation of the birds on the rim is, as far as I know, unique; note especially the wings. In one panel on the body is a horse; the remains of the others are obscure to me. Fig. 3, *a*

<sup>7</sup> Albizzati, 1-5, Pl. 1.

<sup>8</sup> *AM* 54, 159.

<sup>9</sup> Cf. *Délos* XV, Pl. 28, Ae 36 ff.

<sup>10</sup> Cf. *Délos* XV, Pls. 32, Ae 87; 39, Bb 51.

<sup>11</sup> Such as *AM* 58, 100, Abb. 42, from the Kera-meikos.

<sup>12</sup> *Délos* XV, Pl. 54, Bc 4; also Pl. 44, Bc 8.

<sup>13</sup> See R. S. Young in *Hesperia*, Suppl. II, 34.

<sup>14</sup> *AM* 58, 52, Abb. 1, Beil. XVIII, 1.

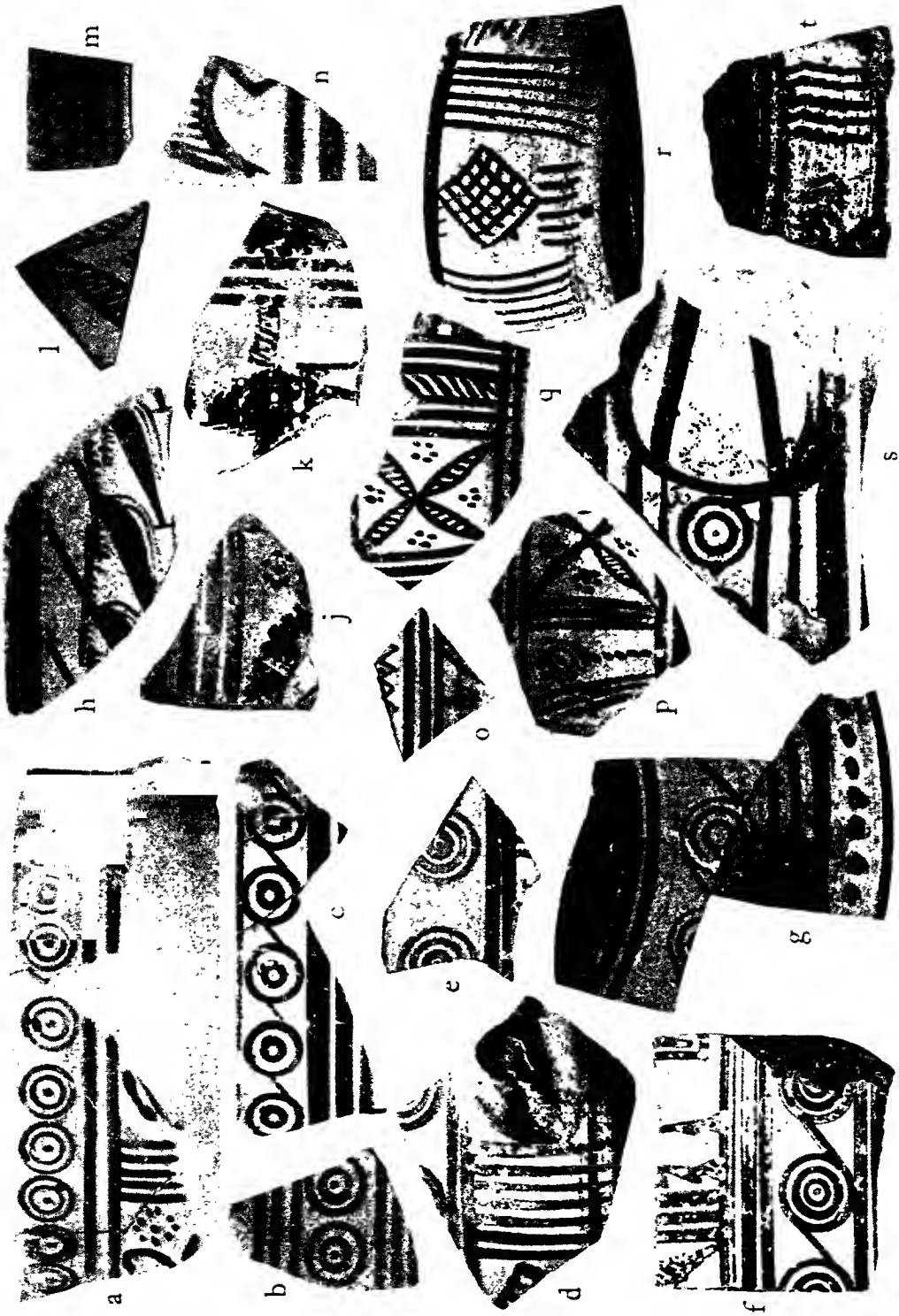


FIG. 2.—POTTERY FROM LEVELS 8 AND 9. Scale, 2 : 3.



is from a bridge-handled krater to which Fig. 3, *g* possibly also belongs; red clay, white slip. The loose patterns of *a* look late, and the curves of the animal on *g* are certainly so. The creature is a poor relation of those on certain amphorae from Delos.<sup>15</sup> Chronologically the closest analogies of this group (Buschor's Siphnian) seem to be with rather advanced Early Proto-Attic, dated by Cook in the first quarter of the seventh century.<sup>16</sup> Other pieces from these levels which can hardly be earlier are the very degenerate kotyle, Fig. 2, *r*, and the 'Rhodian' Subgeometric oenochoe fragments, Fig. 4, *g-j*. The kotyle is related to the cup, Fig. 3, *k*, but of even more collapsed style. It shows a disintegration comparable to the latest phase of Argive Geometric. The 'Rhodian' fragments are discussed below with similar piece from levels 5-7. It is probable that these fragments are intrusive in the lower levels, but not certain. The curious fragment from a round-mouthed oenochoe of the same type, Fig. 3, *h*, may also be 'Rhodian,' but Fig. 2, *b* shows that the shape was known in Cycladic. It is evidently inspired by the friezes round the necks of Attic and Argive vases. It is unslipped. Sturdier imitations of earlier mainland Geometric are the big amphora neck fragments, Fig. 3, *o* and *p*, also unslipped. This type of sub-Dipylon is perhaps more typical of Rhodes than the Cyclades. Other unslipped pieces of similar fabric are the neck fragment, Fig. 3, *b*, whose style seems to be 'Rhodian,'<sup>17</sup> the dish, Fig. 3, *j*, and the krater fragments, Fig. 3, *n* and *q*. The tall feet, Figs. 2, *t* and 3, *r*, both slipped, might be Cycladic or 'Rhodian,' as might the slipped krater fragment, Fig. 2, *n*.

A pretty unslipped Geometric cup-fragment (not stratified) is Fig. 8, *a*. I take it to be Cycladic, perhaps 'Parian.' The raised wing is found in 'Parian,' though not precisely in this form, and so is the adhesion of wing and tail to the bounding line.<sup>18</sup>

Another unstratified Geometric piece is the cup, Fig. 7, *n* (unslipped). This is probably East Greek. The pronounced foot and rim look forward to the later fine black cups.<sup>19</sup>

#### *Levels 5 to 7*

*Cycladic.* There is a much smaller proportion of these wares against the East Greek in these than in the lower levels. Fig. 4, *e* (level 6; slip burned grey) is purely Geometric in character. It has an unusual representation of a bird flying, a wing above and below, legs trailing behind. It is certainly Cycladic. Fig. 4, *n* is an imitation of the Protocorinthian 'Cumae group' jugs.<sup>20</sup> Its red clay and white slip connect it with the group of Cycladic imitations isolated by Payne.<sup>21</sup> Like the three copies of Protocorinthian collected by him, it belongs early in the seventh century, and it seems impossible now to accept the imitation 'Rhodian' plate as belonging closely to the same group, since the 'Rhodian' style which it imitates belongs, as we now think, in the second half of the century.<sup>22</sup> Very similar

<sup>15</sup> *Delos*, XV, Ad, Pls. XX-XXII.

<sup>16</sup> *BSA* XXXV, 202 ff.

<sup>17</sup> Cf. the sub-Geometric vase in London, Weicher, *Seelenvogel*, Abb. 38, 39. See below, p. 13.

<sup>18</sup> *BSA* XXIX, 289 f.; *AM* 1903, 186, Abb. 51.

<sup>19</sup> See below, p. 13.

<sup>20</sup> Payne, *Necr.* Fig. 4; *PV* Pl. 7.

<sup>21</sup> *JHS* 46, 211.

<sup>22</sup> See below, p. 12; cf. the Cycladic aryballoi of a shape derived from late Protocorinthian and decoration from 'Rhodian' of about 600 B.C.

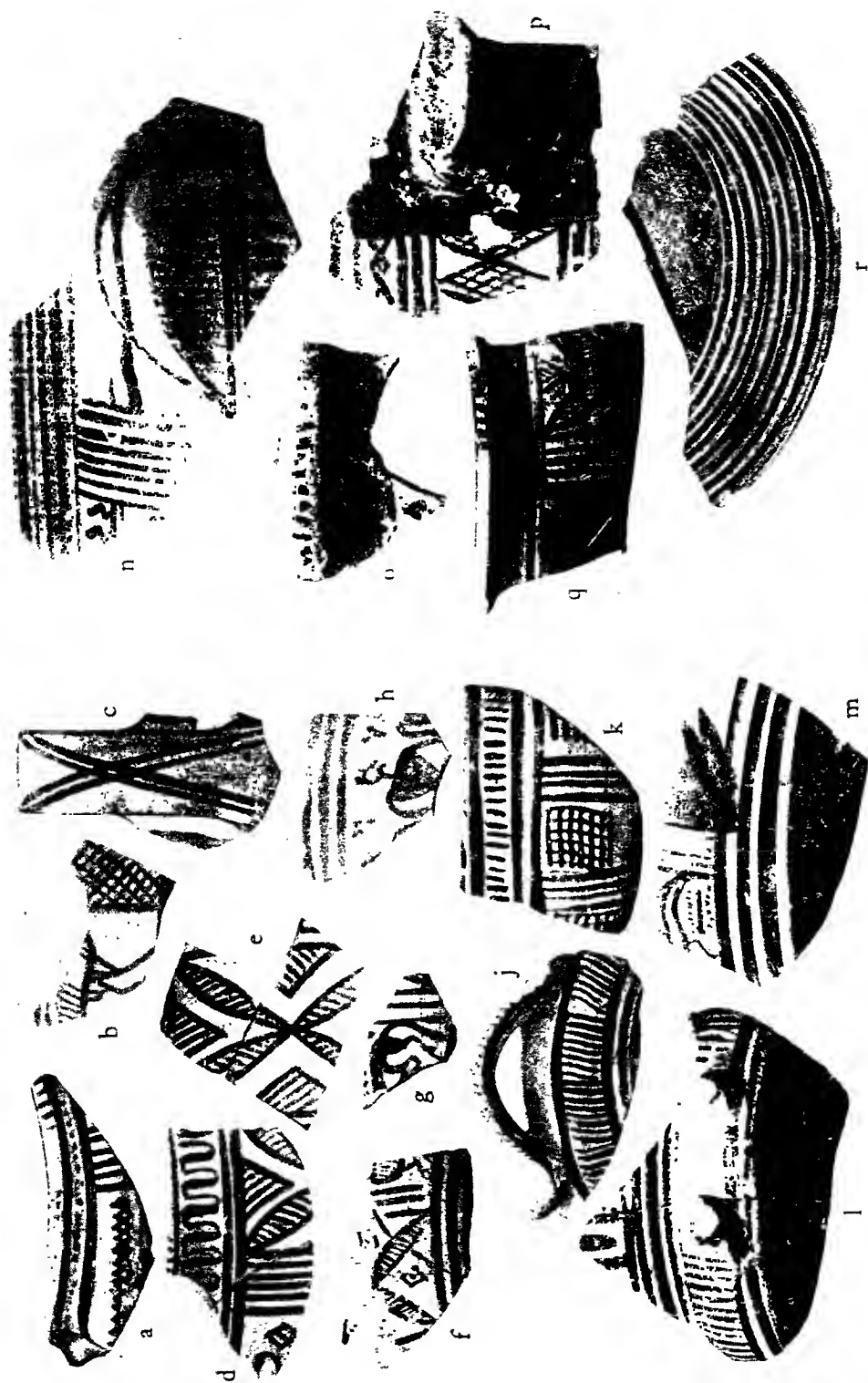


FIG. 3.—POTTERY FROM LEVELS 8 AND 9. Scale, 1 : 3.

in fabric and contemporary in decoration with Fig. 4, *n* is Fig. 4, *l* and *m* (level 6) from an oenochoe with a sharp shoulder, a regular Protocorinthian shape not easily paralleled in Cycladic. It evidently belongs to the same group, and the same is probably true of the large krater, Fig. 4, *p* (level 5; identical fabric). It has white bands painted inside. The paint of all three is fired red. Fig. 4, *a* (thin white slip) is from a krater. It is a poor work of the later 'Parian' style.<sup>23</sup>

'*Rhodian*.' On the divisions of 'Rhodian' vases I follow R. M. Cook:<sup>24</sup> 'Rhodian' covers the wild goat oenochoe and all that hangs round them, including various classes of sub-Geometric vases; these vases were certainly made in other centres besides Rhodes, but the distinctions are not clear at present, and the term is convenient. More important, and quite as difficult, is the chronology. I use Miss Price's terms, 'Rhodian' A and B,<sup>25</sup> in Cook's modified application, by which B means a changed style marked by new shapes, coarser technique, poorer drawing, and the introduction of incision on certain areas of certain shapes. Rumpf's division into 'Camirus' and 'Euphorbos' groups I cannot altogether follow.<sup>26</sup> 'Camirus' seems to correspond roughly to A, 'Euphorbos' to B, with inexplicable accretions from A and equally inexplicable subtractions to fill certain 'Splittergruppen.' Rumpf regards these two groups as parallel, running 'vom hohen 7 bis ins 6 Jahrhundert,' but Miss Price and Cook seem to me right in supposing, with the support of the Clara Rhodos graves, that 'Rhodian' B comes in about 600. There is rather little of 'Rhodian' B from Al Mina, and a more pertinent point is the chronological development within 'Rhodian' A. This, however, is even more difficult. The generally accepted view is that put forward by Kinch<sup>27</sup> and followed by Miss Price. This division is based on the change of the roundel from the form of our Pl. II, *h* to that of our Pl. I, *m*. In general, this gives us as the earliest type of oenochoe the rather tall shape with high shoulder, most typical 'Rhodian' vase (Kinch, Fig. 79), followed by the broader type with more elaborate decoration, of which the Lévy jug in the Louvre is the outstanding example. Rumpf reverses this arrangement. For brevity I will refer to these two groups as the tall-jug style and the broad-jug style. Clara Rhodos makes it clear that the broad-jug style is roughly contemporary with Transitional and Early Corinthian at Corinth—that is, it belongs in the last third or so of the seventh century. The evidence for the tall-jug style is smaller,<sup>28</sup> but seems to point to very much the same date. I shall try to show that it is possible to trace earlier connexions for the broad-jug style, which are lacking for the other;<sup>29</sup> on the other hand, the broad-jug style also has clear connexions with 'Rhodian' B.<sup>30</sup> My impression is that the two groups are parallel, but it cannot be decided without a clearer knowledge of what preceded the wild-goat style. Certain sub-Geometric

<sup>23</sup> Cf. *JHS* 46, Pls. 8-10 (except 9, 2); Dugas, *Céramique des Cyclades*, Pl. 15; *Délos* XVII, Pls. 15 ff.

<sup>24</sup> *BSA* XXXIV, 2 n. 1.

<sup>25</sup> *East Greek Pottery*, 11 ff.

<sup>26</sup> *JDI* 1933, 61 f. nn. 9, 10, 11; 69-83.

<sup>27</sup> *Vroulia*, 195 ff.

<sup>28</sup> *CR* VI-VII, Papatilures Sep. 12. pp. 51 ff.,

61 ff. and Sep. 27, pp. 81 ff.; Nisyros, Sep. 21, pp. 509 ff.

<sup>29</sup> See below, pp. 12 ff.

<sup>30</sup> Kinch, Fig. 115 is a 'Rhodian' B oenochoe clearly derived from the broad-jug style; see also on Pls. II, *m-o* and III, *k*, below, p. 16.



FIG. 4.—CYCLADIC, 'RHODIAN' AND 'NAUGRATHI' FRAGMENTS. Scale, 2 : 3.

and orientalising pieces must belong to the earlier part of the century,<sup>31</sup> but there is no consistent development visible from the genuine Geometric of Rhodes<sup>32</sup> to the wild-goat style—only the flimsiest threads.<sup>32a</sup>

The large majority of 'Rhodian' fragments from Al Mina<sup>33</sup> belong to the broad-jug style, but Pl. II, *h* (level 7) and Pl. III, *t* (level 5) are from typical tall jugs, while Pl. III, *g* and *h* are from a jug with shoulder decoration like Kinch Fig. 89; these belong to the tall-jug style, as do the stemmed dishes, Fig. 5, from which the jugs with shoulder decoration often borrow their composition. For an admirable discussion of stemmed dishes see Kinch.<sup>34</sup> Fragments of several were found at Al Mina; I illustrate pieces of five normal ones in Fig. 5.<sup>35</sup> Fig. 5, *a* and *c-f* are of the original type in which the 'rays' are not attached to the border at the top, and are thought of as groups of reeds growing round a pool;<sup>36</sup> *b*, and *g-j* are of the later type in which the reeds have been misunderstood, turned upside down and become mere rays. For the pattern between the reeds on *a* cf. the inner circle of Kinch, Fig. 125. *c* had walking geese as well as patterns in the gaps. The pattern recurs in almost identical form on a reed dish in Boston with faces in the other gaps.<sup>37</sup> The colouring of some reeds red is unusual, but recurs on the Boston dish.<sup>38</sup> *b*, *g-j*, and *k-l* with faces and rays stand between the Boston reed dish and degenerate 'Rhodian' B pieces like Kinch, Fig. 128, but nearer the former. The tusks of *g* are abnormal and interesting, showing that a Gorgon is meant. The Gorgon on the prow for food peers among the reeds (Boston dish), and we see her on her way home on the plate in the British Museum.<sup>39</sup> Sphinxes also like goose.<sup>40</sup> *b* and *g* have handles; for those of *b* cf. a cup in Rhodes.<sup>41</sup>

Pl. III, *a* is from a lid, like one from Naucratis.<sup>42</sup> The decoration of these is borrowed straight from the stemmed dishes, but reversed so that, as always on lids, the rim becomes the ground-line. Also related to tall jugs and stemmed dishes are the squat oenochae, Pl. III, *q-r* (levels 5-6) and *s*.<sup>43</sup> The neck, Pl. III, *d* (levels 6-7) could be from either group, and so could the pretty rim-fragment (from what shape of vase?), Fig. 4, *f*.

Fragments from broad jugs are Pls. I, *a*, *c*, *d*, and *f-j*, 2, *b* and *r*, and III, *j*, *l*, *m* and *n-p*. The delicate style of I, *a* (levels 6-7) stands rather apart, but I, *c*, *d* and *f-j* and II, *r* are particularly close to the Lévy oenochoe, and take with them I, *b* (level 5) and III, *e* and *f* from round-mouthed jugs, I, *e* from a dish, and I, *m* and *n* (level 4) from a kind of bird-bowl. The dogs on I, *h* and *j* may be from the same frieze as the deer on *f*, or there may have been a second body-frieze with dogs and goats. The face under the handle is unusual; cf. the dishes, Fig. 5, and an oenochoe from Knossos.<sup>44</sup> The feet

<sup>31</sup> See below, p. 13.

<sup>32</sup> CR III, 85 ff., 94 ff., 131 ff., 149; VI-VII, 41 ff., 75 ff., 119 ff., 189 ff.; VIII, 172.

<sup>32a</sup> See below, p. 16.

<sup>33</sup> All 'Rhodian' fragments are slipped except where stated to be unslipped.

<sup>34</sup> *Vroulia*, pp. 250 ff.

<sup>35</sup> On Pl. I, *e* and Pl. II, *m-o* see below.

<sup>36</sup> *Vroulia*, pp. 251 ff.

<sup>37</sup> Kinch, Fig. 99; Fairbanks, 294, Pl. 28. It is

a compressed version of the lotus-bud pattern, Kinch, Fig. 87, *b*.

<sup>38</sup> Cf. also the squat oenochoe, Pl. II, *r*; see below.

<sup>39</sup> Buschor, Fig. 60.

<sup>40</sup> CR IV, 336 Fig. 372.

<sup>41</sup> CR VI-VII, 97, Fig. 109.

<sup>42</sup> *JHS* 44, pl. 8. 1.

<sup>43</sup> Cf. Kinch, Fig. 104.

<sup>44</sup> *BSA* XXIX, Pl. 10, 7.



FIG. 5.—'RHODIAN' STEMMED DISHES. Scale, 2 : 3.

of the feline (or canine?) in the shoulder-frieze of *f* seem unreasonably small, especially as the shoulder-frieze is usually the largest; they may belong to a small creature introduced like a piece of filling ornament—*cf.* the round-mouthed jug in Leningrad.<sup>45</sup> Behind them comes the foot of a bird, facing the same way; normally in this style birds flank the central ornament of the shoulder-frieze, but Pl. I, *d* shows a griffin in this position. Pl. III, *j* shows a surprisingly active scene: tail of a seated feline to right; to left rump of a goat, with another jumping up over it. The oenochoe Pl. I, *c* and the dish Pl. I, *e* are particularly close to each other. The dish is decorated with concentric friezes like those on oenochoe, and has no relation to the metope style of the normal stemmed dish (Fig. 5).<sup>46</sup> This type of dish decoration however is also imitated on lids.<sup>47</sup> The loop-pattern, which is a regular frieze division on jugs of this style,<sup>48</sup> recurs on the dish Pl. II, *m-o*,<sup>49</sup> and on the dinos, Pl. II, *k* and *l* (level 6). The panther on the latter is one of the few frontal panthers on 'Rhodian' vases. I know three others, apart from those of the incised style which are in a different tradition: one on an unpublished oenochoe in the Vlasto collection, one on the round-mouthed jug in Leningrad,<sup>50</sup> and the third on the plate, Kinch, Fig. 110. The last is a work of styleless incompetence—the senility of 'Rhodian' B. It probably owes its whiskers to influence from Corinth, where they were worn by panthers from the mid seventh century onwards.<sup>51</sup> The stylisation of the eyes on the Leningrad vase is likewise a borrowing from Corinth, where it is used for lions from the Early Corinthian period onwards.<sup>52</sup> For panthers it is only used on a group of Middle Corinthian vases, not of the earliest sixth century.<sup>53</sup> The 'Rhodian' vase can hardly be as late as these—it could be imitated from a Corinthian lion—but it is likely to be towards 600, when Corinthian influence begins to show. The stylisation of the panther's mask on the Leningrad vase is based on a tripartite division: the vertical line of the nose and two diagonals running up to the ears; that on the Vlasto jug is divided by the strong line between the upper part of the face and the large, lined muzzle. Ours puts about equal emphasis on the two divisions, and is perhaps transitional. The long flapping paws are also found on the Vlasto jug, and are not widely paralleled in 'Rhodian.' They occur again on the Cycladic plate from Delos,<sup>54</sup> which is certainly imitated from a work of this group. The group consists, to my knowledge, only of the Vlasto oenochoe, our fragments, and the inferior (later?) round-mouthed jug in Berlin.<sup>55</sup> It stands close to the Lévy group, but has peculiarities of style and motive. The Nisyros finds<sup>56</sup> show us a provincial offshoot of the 'Rhodian' style of the beginning of the sixth century; the Vlasto group may be a similar provincial adaptation of the style of the Lévy group.

Another piece intimately related to the Lévy oenochoe is the 'bird-

<sup>45</sup> *Compte-Rendu* 1870-71, Pl. IV.

<sup>46</sup> See above, p. 10.

<sup>47</sup> *J.M.* 54, 23, Fig. 17, 1.

<sup>48</sup> Pls. II, *r*, III, *n-p*; *Annuario* X-XII, Pl. 24, Fig.

462: Munich, *SH* 449, Figs. 54, 55.

<sup>49</sup> See below, p. 16.

<sup>50</sup> See above, n. 45.

<sup>51</sup> Pl. IV, *m*: see below, p. 18.

<sup>52</sup> Payne, *Necr.* 69 n. 3, traces it to Assyrian models.

<sup>53</sup> *Necr.* nos. 140 bis, 1054, 1055.

<sup>54</sup> See above, p. 6; *Délos* X, pls. 14, 59.

<sup>55</sup> Neugebauer, *Fuhrer*, Pl. 17.

<sup>56</sup> *CR* VI-VII, 475-543.

bowl,' Pl. I, *m* and *n*; note particularly the form of the birds' tails and the spotting of the upper wings, both of which are found on the Lévy vase. This is a piece of peculiar interest; technique and style are those of the Lévy group; the shape is the earlier type of bird-bowl,<sup>57</sup> with faintly inset rim; while the red-and-white interior decoration (Fig. 6) connects it with the eye-bowls<sup>58</sup> and Naucratic chalices. Another 'bird-bowl' of the same shape (Pl. I, *p-r*) shows birds with the same dotted upper wings, but it has more in common with ordinary bird-bowls: it is unslipped and the pendant triangles are cross-hatched. By the same hand is the exquisite bird on the unslipped interior of an offset cup rim, Pl. I, *l*; the outside, Pl. I, *k*, is slipped and bears a pattern which recurs on the round-mouthed jug in Berlin,<sup>59</sup> close to the Lévy group, and on a related vase in London.<sup>60</sup>

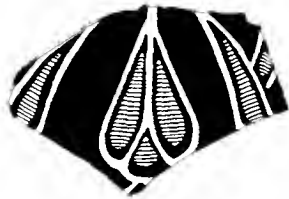


FIG. 6.—INTERIOR OF PLATE I, *m* AND *n*. Scale, 1 : 1.

Cups of this type are generally plain black with red and white bands;<sup>61</sup> fragments of a considerable number of these were found at Al Mina. They are often very exquisite in make. They are generally dated in the sixth century, but the associations of our bird fragments point to a floruit in the later part of the seventh. Closely associated with these black cups are the black, round-mouthed jugs with red and white bands, of which numbers were also found at Al Mina; a complete example has already been illustrated by Sir Leonard Woolley.<sup>62</sup> This shape also has close associations with the Lévy group and with the sub-Geometric tradition, which it helps to link together. Round-mouthed oenochorae more or less closely associated with the Lévy group are: our Pls. I, *b*, *3*, *e* and *f*, the vases in Leningrad<sup>63</sup> and Berlin<sup>64</sup> and another in Brussels. All these have a great deal of subsidiary decoration of a purely sub-Geometric character, and there are many which are entirely decorated in this manner. Those with animal friezes are all very squat, with almost flat shoulders, and many of those with sub-Geometric decoration are the same, and no doubt belong to the same period, or even later—*e.g.*, one from Rhodes found with Corinthian material of the beginning of the sixth century and showing some very late elements in its decoration.<sup>65</sup> Others, however, are taller, and these have a more limited, genuinely sub-Geometric, decoration. These I take to be earlier. There is an unslipped example in London,<sup>66</sup> a slipped one in Samos;<sup>67</sup> our Fig. 7, *e* is from an almost identical vase. Our Fig. 4, *g-j* come from levels 8-9, but that is evidence that cannot be pressed, especially as the bird

<sup>57</sup> See below, p. 14.

<sup>58</sup> *JHS* 44, 186 ff., Fig. 13.

<sup>59</sup> See above, p. 12, n. 55.

<sup>60</sup> Kinch, Fig. 102.

<sup>61</sup> A good example in Munich, *SH* 493, Taf. 18.

<sup>62</sup> *JHS* 58, Pl. 13.

<sup>63</sup> See above, p. 12, n. 45.

<sup>64</sup> See above, p. 12, n. 55.

<sup>65</sup> *CR* IV, 54 ff.

<sup>66</sup> Weicher, *Seelenvogel*, Abb. 38, 39; cf. the trefoil-mouthed jug, *CR* VI-VII, 47, Fig. 43.

<sup>67</sup> *AM* 58, 133 f., Abb. 84 f., Beil. 44, 1 and 2.



on *g* shows interesting connexions with those on the bowl, Pl. I, *p-r*: note the treatment of the wing-feathers, the proportion and disposition of the legs. The more or less elaborately decorated pieces, Figs. 4, *o* (level 5) and *r* (levels 6-7), and 7, *a* (level 6-7), *b*, *c* (unslipped; level 6), *d*, *f*, *g*, *l*, and *m*, must be partly contemporary with those with animal friezes, partly transitional to them from pieces like 7, *e*. Fig. 4, *d* may well have had animal friezes on the body; cf. Pl. III, *e* and the jug in Brussels. The sub-Geometric krater with incision on the rim, Fig. 7, *h* and *j*, is closely paralleled in Samos,<sup>68</sup> and was perhaps made there. Fig. 4, *c*, pyxis with slightly concave sides, is imitated from Corinth, where it is a regular shape in the later seventh century.

Some of the earlier-looking round-mouthed jugs are unslipped, and resemble bird-bowls in fabric—e.g., the one in London and Fig. 7, *c*—while the decoration of pieces like 7, *e* and its counterpart in Samos<sup>69</sup> makes a stylistic connexion with bird-bowls. Of these there are a great many fragments from Al Mina, but I only illustrate a few showing some stages of development, Fig. 8, *f-k*. This development is clear and continuous, and is best illustrated by the finds from Delos.<sup>70</sup> First come vases like *Délos* 13 and 15, our Fig. 8, *f*, rather deep cups with a small inset rim and horizontal handles sometimes slightly tilted. They are black round foot and handles, and the decoration, in a reserved panel on each side, consists of four panels divided by vertical lines with a band of double-axe pattern<sup>71</sup> underneath. In each of the end panels is a cross-hatched lozenge, while the inner pair show one a 'Rhodian tree,' the other a bird. These and the closely related *Délos* 4 look straight back to the regular Geometric cup with offset rim and tilted handles. The next modification comes with *Délos* 6-10, where the panel with the tree is omitted and the bird takes the centre; also the band of double-axe is reduced to lozenges or a zig-zag—the form in Fig. 8, *g* is abnormal. The bird-bowl proper (*Délos* 30-35) is much shallower, has a straight rim, voided rays at the base instead of black, and no black round the handles, but the three panels, bird between lozenges, remain, and the transition can be traced. There is a group of bird-bowls (*Délos* 17-27) of the normal shallow shape, which yet have a very slight inset rim, hardly more than a grooving, a black area at the base instead of rays, and black areas at the handles, sometimes reduced to mere bars, but sometimes quite broad. Certain of these (*Délos* 23-27), our Fig. 8, *j*, have, in addition, a row of dots under the picture, clearly derived from the pattern-band on the earlier type.<sup>72</sup> This must be the typological development, but it is clear that the types overlapped considerably. *Délos* 28, with dots, and 29, without dots or black at the handles, have straight rims, while Pl. I, *m* and *n* and *p-r* have the slight inset. Fragments of all types are found indiscriminately in levels 5-7, but none in the lower levels.<sup>73</sup>

<sup>68</sup> *AM* 58, 76, Abb. 26, *c*, Beil. 25, 7, 8 and 14.

<sup>69</sup> See above, p. 13, n. 67.

<sup>70</sup> *Délos* XV, *Vases géométriques rhodiens* 6-35, Pls. 46-48.

<sup>71</sup> *Délos* 15 has no pattern below, but is otherwise of this type.

<sup>72</sup> Cf. *AM* 54, 12 Abb. 3, 1, a cup of the earliest

type, with tree as well as bird, and a row of dots below; also *Délos* XV, Pl. 54, 16.

<sup>73</sup> One of the type *Délos* 23-27 was found at Gozlu Kule with a Protocorinthian aryballos of transitional globular to ovoid type; *AJA* 1938, 44, Fig. 33.

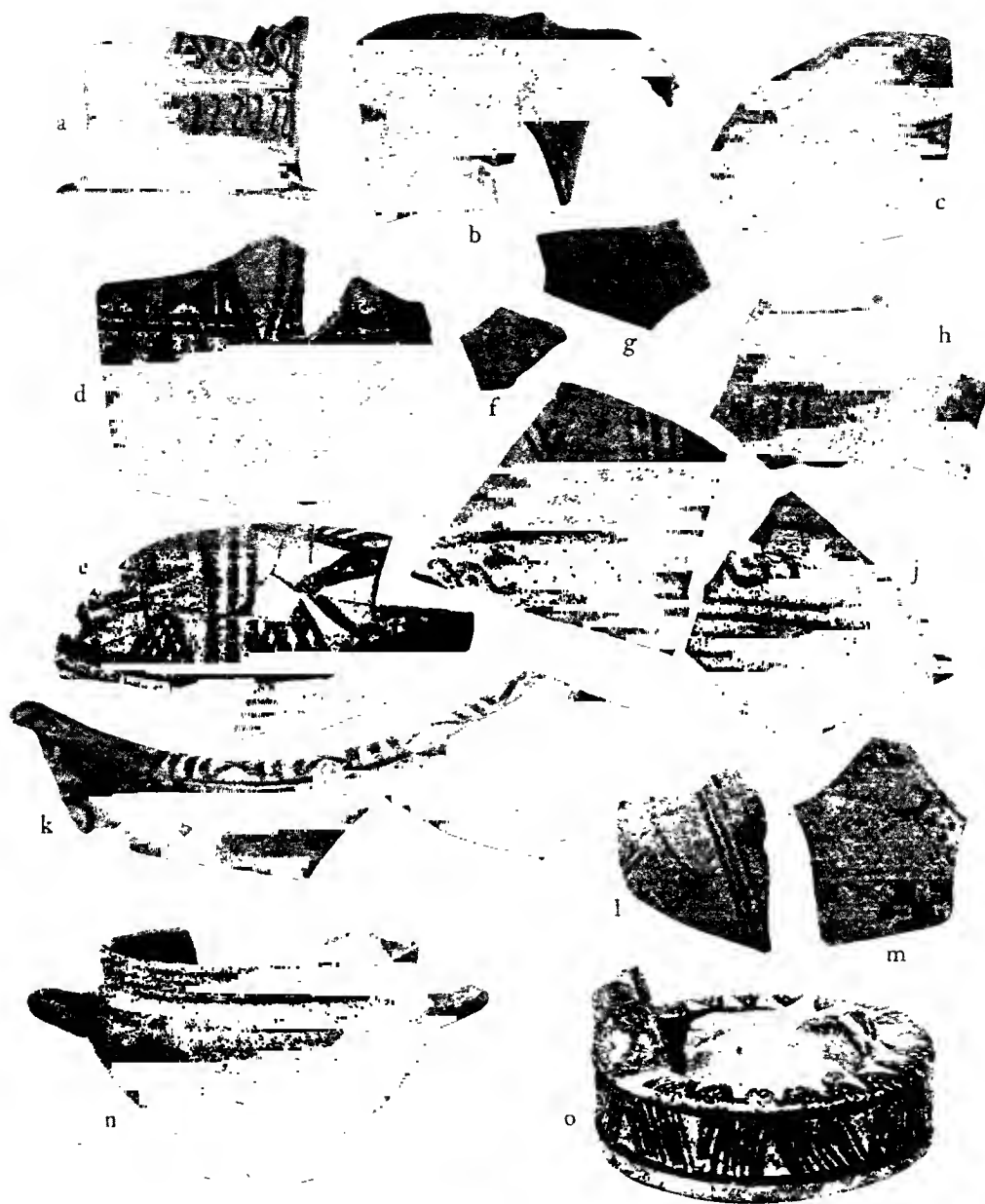


FIG. 7.—SUBGEOMETRIC 'RHODIAN' POTTERY. Scale, *a-m*, 1 : 2; *n-o*, 2 : 5.

There are also fragments of similar bowls decorated with groups of fine lines.<sup>73a</sup> This decoration often occurs inside as well as out, and the beautiful foot, Pl. I, *o*, belongs to such a bowl (unslipped).

Thus the sub-Geometric of round-mouthed oenochoes and bird-bowls can be connected both with true Geometric and with the wild-goat style of the later part of the seventh century, but the thread is tenuous.

'Rhodian' B is represented at Al Mina by oenochoes, Pl. II, *j* and *p*, trefoil-mouthed olpae, Pl. II, *a* (level 6), *c* (level 5), and *f* and *g* (level 7), round-mouthed olpe, Pl. III, *b*, krater, Pl. II, *d* and *e* (level 6) dinos, Fig. 7, *k*, stemmed dish, Pl. II, *m-o*, and cup, Pl. III, *k*. The drawing of the animals on the last two puts them on the edge of 'Rhodian' B, but in other respects they look to 'Rhodian' A—the broad-jug group. Pl. III, *k* is from a cup like Kinch, Fig. 102, in London, which it resembles in style, though later and not so careful; Pl. II, *m-o*, from a stemmed dish decorated on both sides.<sup>74</sup> The loop pattern is a link with the Lévy group; the zig-zag with filling recurs on Fig. 5, *b* and on the London cup just cited. For the drawing of the goats on Pl. II, *d, j*, and *m cf.* the typical 'Rhodian' B oenochoe, Kinch, Fig. 114. The trefoil-mouthed olpe is a shape introduced at this time; for Pl. II, *a, c, f* and *g cf.* an example in Turin.<sup>75</sup> The voided ray on the shoulder is regular; it is otherwise chiefly found on bird-bowls. Pl. III, *b*, different in shape and decoration, copies the round-mouthed olpe of Corinth, common there in the second half of the seventh century. Pl. II, *d* and *e* seem to come from something like a bell-krater—not a common shape in 'Rhodian' of this period, but known.<sup>76</sup> The large maeander connects with the sub-Geometric work of the period;<sup>77</sup> it is also found earlier on pieces related to the Lévy group.<sup>78</sup> The dinos, Fig. 7, *k*, is of the same shape as the panther vase, Pl. II, *k*,<sup>79</sup> and a sub-Geometric piece, Fig. 4, *b* (levels 6–7). The complete vases must have been something like Kinch, Fig. 103, but the form of lip and handles differs slightly. Fig. 4, *q* is from a necked dinos, another regular shape of the period.<sup>80</sup>

*Protocorinthian and Corinthian.*—There was evidently a small but steady importation of Protocorinthian into Al Mina. The quantity does not compare with the 'Rhodian,' but it covers most of the period of levels 5–7, and though none was found in the lower levels, at least one unstratified piece must be of that date—the aryballos Pl. IV, *a* which cannot be as late as the end of the eighth century, and might be near the middle.<sup>81</sup> Pl. IV, *b* (level 6–7) is from a typical seventh century aryballos with running dogs, and there are others of seventh-century types.<sup>82</sup> The big lid, Pl. IV, *d* (levels 6–7), is of the overfitting type proper to the kotyle-pyxis, and looks earlier than its stratification. *c* belongs to a pyxis with straight or slightly concave sides.<sup>83</sup> It is not of the late seventh-century type with broad red and

<sup>73a</sup> *Délos*, XV, Pl. 48, 36.

<sup>74</sup> *Cf. MA XIV*, Pl. 26.

<sup>75</sup> *JHS* 46, 209, Fig. 2 and Pl. 9, 2.

<sup>76</sup> *Metz. Mus. Studies*, V, 120 f., Figs. 2 and 3.

<sup>77</sup> *CR IV*, 55, Fig. 26.

<sup>78</sup> *E.g.*, the Leningrad oenochoe (see above, p. 12, n. 45), and a splendid fragmentary krater from Samos

*AM* 58, 85 ff., Abb. 31, 32, Taf. II and III.

<sup>79</sup> See above, p. 12.

<sup>80</sup> *Cf. Kinch*, Pl. 15.

<sup>81</sup> *Cf. Johansen*, Pl. 4, 1 and 5.

<sup>82</sup> *As Johansen*, Pl. 15, 2, *Necr.*, Fig. 8, *b*.

<sup>83</sup> *Cf. Johansen*, Pl. 18, 3.

black bands, but the red bands point that way; probably about the middle of the century. There is a fragment of a slightly later pyxis of this type. The majority of fragments are from sub-Geometric kotylai; I illustrate only a few typical pieces (Pl. IV, *e-j*). There are none from levels 8-9, but some can hardly be later than the first quarter of the seventh century. For the types *cf.* Johansen, Pl. 9; our fish is own brother to those on Johansen, Pl. 9, 3, found at Vulci. Black kotylai with the curious pattern of Pl. IV, *h* are common; <sup>84</sup> generally both pattern and bounding lines are applied in white, but here, as in Johansen, Pl. 9, 1, the pattern is reserved. The latter is of early shape, but the type with the ornament painted lasts well into the seventh century, and there is no proof that that with the ornament reserved does not also. Black kotylai with white dot-rosettes on the rim (Pl. IV, *j*) are rarer; white dot-rosettes, however, are common on the black parts of jugs in the third quarter of the seventh century (Pl. IV, *l*), and the kotylai perhaps belong to the same time. There are also fragments of sub-Geometric cups with offset rim.<sup>85</sup> Of larger vases there are pieces of at least three olpae and two oenochoae, all from level 5. Of the latter, not illustrated, one was scale-pattern, the other decorated with friezes of animals in pure silhouette, separated by polychrome bands; dot-rosettes in the field. This sub-Geometric technique is unusual on vases of this scale. It is evidently transitional. Of the olpae, Pl. IV, *k-p*, *k* and *m* belong to one vase, *l* to another, and *n-p* to a third. The first and second may be late Protocorinthian or Transitional. The band of tongues in the middle of scales on *m* is most unusual. Tongue-pattern is hardly ever found except at the spring of neck, foot, or handle; <sup>86</sup> analogous, however, is the doubling of the tongue-pattern at the base of a late Transitional oenochoe in Munich.<sup>87</sup> By far the most important piece is *n-p*. The picture was on a narrow frieze round the widest part of the belly; the vase black above with incised scale-pattern, and no doubt plain black below with rays on a reserved band at the base. This is a regular formula of decoration at this time both for olpae and oenochoae,<sup>88</sup> Some of the scales are single and red, some double and black, with white dots on the outer part, as on the olpe just cited, and another without figure decoration in the Vatican.<sup>89</sup> On these vases and on the lower part of ours the red and black are arranged in alternate horizontal rows, but the fragment from the upper part of our vase (*p*) shows a diagonal arrangement, as on the oenochoe in Munich cited above. Two fragments of the picture survive: one has the tail of a feline moving to right, followed by part of the face of a panther, of abnormally elaborate stylisation; the other the head of an archer shooting to right, with part of his bow and quiver. The panther is in black-figure technique, the archer in polychrome. Technique and style connect these fragments

<sup>84</sup> See Johansen, 69.

<sup>85</sup> As Johansen, Pl. 19, 1 and 2.

<sup>86</sup> *Cf.* Beazley in *BSA* XIX, 239. It is of course habitually used for the framing of the tondo on the inside of Attic black-figure cups, and appears exceptionally as an isolated band on the outside of

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two Siana cups from Rhodes in the British Museum, *CTA* fasc. 2, III H e, Pl. 10, 2 and 6.

<sup>87</sup> *SH* 234, Pl. 7; *Necr.* no. 122.

<sup>88</sup> Olpe, *Necr.*, Pl. 8, 1-6; oenochoae, Albizzati, pl. 4, 67 and 70.

<sup>89</sup> Johansen, Fig. 36; *Necr.* no. 43.

with the Chigi group.<sup>90</sup> The drawing of the archer's head is not equal to the best on the Chigi vase, but *cf.* the turning hunter in the lower frieze.<sup>91</sup> The outline is incised; the mouth is distorted by a scratch in the reproduction. The incised eye with black pupil is used throughout the Chigi vase. Hewears the short Etagenperücke with curl fringe, common in Dedalic plastic but rare in vase-painting.<sup>92</sup> Particularly close among plastic works is the bronze kouros from Delphi,<sup>93</sup> supposedly made in Crete. A beard is hardly ever found in Dedalic plastic. There are two other archers on Protocorinthian vases of the polychrome style: the Herakles of the aryballos in Berlin,<sup>94</sup> and the 'Teucer' of that in the Louvre;<sup>95</sup> both earlier than ours. Our man is helmetless and can hardly be taking part in a battle—the flute-player on the Chigi vase is a non-combatant—but he might possibly be Herakles. The stylisation of the panther's mask has no exact parallel. It is the earliest I know with whiskers; later they become common.<sup>96</sup> It is related to the lions of the Chigi vase and a fragment from the Argive Heraeum.<sup>97</sup>

Some of the sub-Geometric pieces no doubt belong to the later part of the century, and there is one piece of a foot-ball aryballos which must be Early Corinthian.

There are a number of fragments of imitations of Protocorinthian cups and kotylai, all from the upper levels; I illustrate examples in Fig. 8, *b-d*. An imitation of exactly this kind was found in Thera, and is no doubt Cycladic.<sup>98</sup> Ours are probably also Cycladic imports, but it is conceivable that they are of local make. The clay is a coarse greyish-brown, *d*, slipped. Protocorinthian vases were also copied in Attica, Laconia, and especially Ithaca, but they resemble ours less closely than the Cycladic example.

*Miscellanea.* The nearest parallel I know to the ring-vase, Fig. 7, *o* (level 6; brown clay, no slip), is from Delos.<sup>99</sup> The latter is classed among the 'vases-couronnes rhodo-ioniens,' but differs in shape and fabric from the rest of the group. If they are 'Rhodian' they presumably belong to the early sub-Geometric class, for they are not far from true Geometric, but they might alternatively be Cycladic. Fig. 4, *k* (levels 6-7) is a typical plain 'Naukratite,' or as now generally accepted Chiot, chalice.<sup>99a</sup>

The crab of Pl. II, *q* (level 7; another fragment with part of a second crab from level 6) finds far its closest parallels on an aryballos from Delos.<sup>100</sup> Dugas observes that the shape of this vase is like Protocorinthian of the transition from globular to ovoid, but that the fabric will hardly do. It can scarcely be later than the beginning of the seventh century, but it is difficult to say how closely ours goes with it. Dugas cites the crab of the Aristonothos vase as another example of the animal used decoratively.

<sup>90</sup> *Necr.* nos. 39-43.

<sup>91</sup> *PI*, Pl. 28, bottom right.

<sup>92</sup> Jenkins, *Dedalia*, 20.

<sup>93</sup> *Ibid.*, Pl. 6, 2, *a*: dated by Jenkins 640-630, which is later than ours.

<sup>94</sup> *PI*, Pl. 21.

<sup>95</sup> Johansen, Pl. 33, 1a.

<sup>96</sup> *E.g.* *Necr.* Pl. 13, 1 (late Transitional, not far

in type from ours); 23, 4; 24, 5; Fig. 140 bis. See also above, p. 12.

<sup>97</sup> *Necr.* no. 41, Pl. 8, 7.

<sup>98</sup> *AM* 28, Beil. 32, 5.

<sup>99</sup> *Délos* XVII, Pl. 48, 48.

<sup>99a</sup> W. Lamb in *BSA* XXXV, 158 ff.

<sup>100</sup> *Délos*, XVII, Pl. 65, 14.



FIG. 8.—MISCELLANEOUS FRAGMENTS. Scale, 1 : 2.

That is far less close to ours, though it has eight legs against the six of those from Delos.

Fig. 8, *e* belongs to a widely distributed class of amphorae, probably Attic. They run through the seventh century and probably well into the sixth.<sup>101</sup>

Fig. 8, *l-n* and *o* belong to an interesting group of black-polychrome vases. They are in a soft buff clay with a white slip, covered with black on which the decoration is applied in red, white, and yellow. *o* is a cup with carinated sides; it had one vertical handle from the rim to about half-way down. The shape is unusual. It stands between the handleless kalathos common in Protocorinthian and a lodging-house dream from Sparta.<sup>102</sup> It is black all over except under the foot, and is covered with red bands inside and out. *l-n* are from a large stand bowl, or possibly a separate bowl and stand. *m* is from the rim of the bowl, *l* from high up the stand, and *n* from the foot of the stand. There are fragments from vases obviously of the same fabric as this from the Argive Heraeum.<sup>103</sup> It is very difficult to assign them to a place of origin. Most black-polychrome vases on a large scale use incision—Protocorinthian, Vroulian, Laconian.<sup>104</sup> Naucratis does without in the interior decoration of its chalices, and the outside of a few,<sup>105</sup> and there also the use of white lines to outline and divide—a kind of substitute incision—is found, but style and fabric are wholly different. The Argive Heraeum fragments were, of course, classed by their excavators as local, and this is possible, but there is really very little evidence for the style or even the existence of Argive pottery after the Geometric period. The soft clay rather suggests Laconia, but some East Greek centre is quite as likely.

#### CONCLUSION.

*Contacts.* By far the larger part of the pottery is Cycladic or 'Rhodian,' the latter having a definite preponderance in the upper levels, the former, a less certain one in the lower. This uncertainty is due to the difficulty of placing much Geometric which is simply a feeble shadow of Attic—a type found among more individual growths both in the Cyclades and East Greece. Both Cycladic and 'Rhodian' being terms which cover the products of a number of centres, it is possible that if one could distinguish these centres clearly, one would find that no one of them exported any more to Al Mina than did Corinth, but I doubt this, at any rate for the 'Rhodian,' much of which seems very homogeneous. Of distinguishable centres other than Corinth we have one piece of Chiot (Naucratis; Fig. 4, *k*), one of Attic (?) (Fig. 8, *e*; see also on Fig. 2, *o* and *p*), while it is possible that Fig. 8, *l-n* are Argive or Laconian rather than East Greek. In any case we have no idea whether the presence of the products of any centre imply a direct contact of that centre with Al Mina.

<sup>101</sup> See Burr in *Hesperia* II, 570 ff.; Young in *Hesperia*, Suppl. II, 178 f.

<sup>102</sup> *AO*, 82, Fig. 55.

<sup>103</sup> *AH*, Pl. 60, 8, 14 and perhaps 6: 65, 1 and 2; other fragments from the last two in the British

Museum, and one from another vase.

<sup>104</sup> *AO*, 83, Fig. 56: *BSI* XXXIV, 156.

<sup>105</sup> *CIA* Oxford, fasc. 2 II D Pl. V, 16, 17, 28; *JHS* 44, 208.

*Dating.* The stylistic development and chronology of the pottery of Corinth have been worked out in greater detail and with more security than those of any other Greek vase-painting style of the eighth and seventh centuries B.C., and can help us here. The earliest piece is not stratified, but there is a considerable amount from the upper levels that cannot be later than the first quarter of the seventh century. On the other hand, much of the Cycladic material from the lower levels gives the impression of being no earlier than that quarter. It seems likely that the division comes in that quarter, perhaps rather early. How far back into the eighth century the lower level extends is very difficult to say. The unstratified Protocorinthian aryballos, Pl. IV, *l*, may be as early as the middle; much of the Cycladic looks earlier, but I see none that need go far back into the first half. The latest pieces of pottery from Corinth seem to be Early Corinthian rather than Transitional, but they are few, and there is no evidence of anything as late as 600. The latest 'Rhodian' fragments belong to 'Rhodian' B, which is spoken of as coming in about 600. It may be that these do belong to the beginning of the sixth century, but there are no fragments with incision and no fragments of plates, and the quality of all the pieces is rather high for 'Rhodian' of this period. This might be taken to mean that they represent the beginning of the style, and the Corinthian context to suggest that it began slightly earlier than supposed. In any case they cannot stretch far into the sixth century. The earliest pottery from level 4 is Attic red- and black-figure of about 520 B.C., so that there is a gap of well over fifty years—probably about eighty—in the evidence for Al Mina's Greek contacts.

I have to thank Sir Leonard Woolley for inviting me to publish this material, Mr. F. N. Pryce and Mr. E. A. Lane for notes made on the excavation, and Mr. C. O. Waterhouse for photographs and a drawing.

MARTIN ROBERTSON.

*British Museum.*





FIG. 1.

## A MARBLE LAMP

[PLATES V-VII.]

οὐ παλαιὸν εὑρημα λύχνος. 'The lamp is not an ancient invention.' The words of Athenaeus (15, 700c) have often been quoted. The lamp was familiar to Minoans and Mycenaean, but it died out, and does not reappear till the seventh century. In the dark age that intervened, the Greeks, as Athenaeus goes on to say, used the light of the torch and of other pieces of wood: φλογὶ δ'οἱ παλαιοὶ τῆς τε δαδὸς καὶ τῶν ἄλλων ξύλων ἐχρῶντο.<sup>1</sup> There is only one mention of a lamp in Homer: in *Odyssey* 19, 33-4 Athene, unseen, lights Odysseus and Telemachos with a lamp: 'Pallas Athene went in front with a golden lamp, making a very fine light':

πάροιθε δὲ Παλλὰς Ἀθήνη  
χρύσειον λύχνον ἔχουσα φάος περικαλλὲς ἐποίει.

According to a modern writer, 'the lamp is significantly of gold, and in the hands of Athena, it is therefore something rare and costly, or to speak historically, something new'<sup>2</sup>: but I confess I cannot see how this follows from the text.

Most of this article was written a good while ago. My thanks are due to Mrs. I. Marconi Bovio, Miss Ritcher, Dr. L. D. Caskey, Mr. E. T. Leeds, Mr. F. N. Pryce, Prof. W. Unverzagt and Prof. Robert Zahn for permission to figure lamps in Palermo, New York, Boston, London and Berlin. Prof. Buschor told me of a lamp from his excavations in Samos and generously invited me to publish it. Dr. Jacobsthal kindly read my manuscript, and I have profited by his criticisms. I owe a special debt to Miss Emilie Haspels, who not only took the excellent photographs reproduced in pl. VI and figs. 2, 3, 9, 10 and 14, but also gave me careful notes on the lamps in Sicilian museums: I have been able to check her observations since, and need not say that I found them everywhere accurate. The print used for fig. 17 was given me by Humfry Payne. Another Acropolis lamp (fig. 18) was photographed for me by Mr. H. Wagner. Fig. 1 is due to the kindness of Prof. Ashmole. Pl. V and figs. 15-16 are from photographs by my wife, whom I consult on lamps as

on all other archaeological matters.

<sup>1</sup> On the early history of the lamp:—

Walters, *Cat. of Lamps in the British Museum*:

Burrows and Ure in *JHS* 31, pp. 72-99;

Pfuhl in *Jb* 27, pp. 52-7.

Waldhauer, *Die antiken Lampen der Eremitage*:

Köster in *Amtl. Berichte* 31, pp. 313-14;

Broneer, *Corinth*, iv. 2: *Terracotta Lamps*;

Messerschmidt in *Anz.* 1933, p. 327;

Evans, *Palace of Minos* (index);

Robins, *The Story of the Lamp*;

Robins, 'The Lamps of Ancient Egypt,' *JEA* 25, pp. 184-87.

The chief use of the so-called 'kothon' is supposed to have been as a lamp or 'night-light' (Burrows and Ure, *loc. cit.*; Pfuhl, *loc. cit.*; Ure in *Eph. arch.* 1937, pp. 258-62). The Greek 'kothon,' like the lamp, begins in the seventh century, and would be an alternative solution of the lighting problem.

There are plenty of sixth-century clay lamps; and the American excavations in the Agora of Athens have yielded a seventh-century series.<sup>2</sup> Stone lamps also appear before the end of the seventh century, and it is with these that this paper is concerned.

1. The lamp shown in pl. V and fig. 1 was bought from a London dealer in 1931, and there is good reason to believe that it was found in the isle of Melos. It measures 19.4 centimetres (about  $7\frac{1}{2}$  inches) from side to side, 16.7—originally about 17—from back to front; the height is 5.7. The material is a white island marble of fairly coarse grain. Seen from above and below, the shape is nearly semicircular, with four projections. The largest of these, on the straight side, is the nozzle of the lamp, and is carved into the form of a human head in what is called the 'daedalic' style.<sup>4</sup> The other three projections are pierced vertically, and served to hold chains by which the lamp could be suspended. There were bits of iron chain in the holes when I bought the lamp, but they were recent: the lamp must have been re-used in modern times, perhaps in a Christian shrine. The marble is stained with rust round all three holes.

The lamp could stand as well as hang. It does not rest on its whole bottom, for the bottom is not flat, but bevelled towards the sides. The upper surface, which is similarly ground away, though not so strongly, is carved out to the depth of half an inch, forming a pan or trough for the oil. The rim of the trough has an engraved line on its upper surface. The lower part of one suspension-tube is missing, and the rim of the pan is chipped in two places. The top side of the nozzle is badly worn, and with it the hair on the brow of the head: the damage is chiefly due to burning. The front of the nose is also gone.

2. A fragmentary replica of the lamp has been known for some time. It was found in the sanctuary of Demeter Malophoros at Selinus in Sicily, 'in strata belonging to the first megaron' (that is, the earliest shrine of the Goddess), is now in the Museum at Palermo, and has been published by Gàbrici (*Mon. Ant.* 32, pl. 23, 2), but our picture (pl. VI, 4) is from a new photograph. Only the front edge of the lamp remains, and that is incomplete. The height is 4.7 centimetres, the width of the fragment 12. The lamp was thus smaller than ours; the face looks a little broader; and the work is coarser, although the bad impression is partly due to the unfortunate breaks of mouth and chin, and the crack between hair and left cheek. On the other hand, parts of the surface are less worn than in our lamp, so that some of the forms are seen more clearly. Thus the right eye of the

<sup>2</sup> Pfuhl in *Jb.* 27, p. 35: repeated by Messerschmidt in *Anz.* 1933, p. 327.

On this argument the following things would all be 'new' in Homeric times: balances (Θ 69, X 209), bonds (O 20), brooches (E 425), chains (Θ 19), chairs (Θ 436), cups (Δ 3), floors (Δ 2), lashes (Θ 44), sandals (Ω 341, δ 97), shackles (N 36), thrones (Θ 442), wands (π 172, ω 2), and yokes (E 731).

<sup>3</sup> These are to be published by Mr. Richard Howland, who kindly showed me the series and over-

came my scepticism about the existence of seventh-century clay lamps, which I had often read of, but never seen.

<sup>4</sup> I use the term in the same limited sense as most writers, for example, Pavne, and Jenkins in his *Daedalia*: writers on Sicilian antiquities are apt to give it a wider significance. There will naturally be hesitation sometimes whether to call a particular piece latest daedalic, sub-daedalic or post-daedalic; earliest daedalic, proto-daedalic or pre-daedalic.

Palermo head is very well preserved: our head has the same deeply incised circle round the cornea, and it can be made out in the photographs, but it is not so easy to see as in the Palermo lamp. Again, the hairdress is the same in both, but the thin bands on the forehead are preserved almost entire in the Palermo lamp, whereas in ours all that remains of them is the lower edge and the ends at the temples. It is the characteristic 'layer-hair' of the seventh century. This is often described as a wig, but wrongly<sup>5</sup>: it has no connexion with the Egyptian or any other wigs: it is the way the hair was worn at the time. The hair was cut straight at the forehead, and at the shoulders: combed down daily, it got a wave which artists stylised in their representations, sometimes stressing the horizontal furrows only, sometimes the vertical as well. This general wear was varied by crowns, head-bands, cords, fillets, of different kinds. The peculiarity of our two lamp heads is the thin horizontal bands over the forehead (well preserved in the Palermo lamp, less well in the other): these must have meaning: that a real wear is represented there can be no doubt. Similar bands appear in two other works of the Daedalic period: a clay plaque, from Crete, in Oxford<sup>6</sup>; and a clay head, part of a relief, in Athens.<sup>7</sup> The sphinx in the Oxford plaque wears a high crown or polos: but the two thin bands immediately over the forehead cannot belong to the polos and must correspond to the bands in the lamp-heads: the third band, above the pair, is the lower edge of the polos. In the Athens head, the bands, more numerous, are ornamented with three large rosettes. There are two possible explanations of such bands. Either the long hair has been lifted, a thin band or cord wound two or more times round the head,<sup>8</sup> and the long hair then dropped over the band so as to conceal it except on the brow; or the whole thing is a frontlet, consisting either of a number of narrow bands or cords sewn together, or of a single broad padded band grooved by straight rows of stitches. In the lamps, and the Oxford plaque, the first explanation is as likely as the second; but in the Athens head the second is alone possible, for the rosettes must be sewn or clipped to a firm foundation.<sup>9</sup>

Whether the Palermo head was carved by the same hand as ours may be argued: whether or not, the two go together, and if not by one hand, are from one design, and by master and man, or companions.

3. A third lamp of the same type was found, like the second, in the precinct of Demeter at Selinus, 'among the offerings buried at the north-west corner of the first megaron'. It is now in Palermo (no. 270), and has been published by Gàbrici (*Daedalia Siciliae*, pl. 2, 1; *Mon. Ant.* 32, pl.

<sup>5</sup> Part of the blame is due to the word *Etagen-perucke*, which from its hideousness has a beastly fascination for archaeologists.

<sup>6</sup> Poulsen, *Orient*, p. 148, fig. 173; Dohan in *Metr. Mus. St.* 3, p. 224, fig. 33.

<sup>7</sup> *BCH* 1937, pl. 26, 3 Karouzou.

<sup>8</sup> A single cord, showing on the forehead below the line of the hair, but passing under the long back-hair and concealed by it, may be seen in Eastern Greek statuettes from the earlier part of the sixth century in London. B 438 Pryce *Cat. of Sculpture*, i. pl. 39,

and B 439 *id.* p. 185, and Leipsic (Rumpf in *Ant. Plastik*, pp. 219-20).

Another wear appears in the limestone statue from Eleutherna (*Mon. Ant.* 6, p. 187; Jenkins, *Daedalia*, pl. 9, 1-2; here a fillet passing round the head is exposed everywhere except over the forehead, where it is concealed by the ends of the front hair; so also in a clay head from Camiros in Berlin (Tc. 7994; Knoblauch, *Studien zur archaisch-griechischen Tonbilderei*, pl. 1, 2).

<sup>9</sup> For the rosettes see note 8.

23, 1 and p. 159; *Anz.* 1929, p. 147, figs. 44-5 and Curtius, *Ant. Kunst*, ii. fig. 252; our pl. VI, 1-3, and figs. 2-3). The preservation is excellent: in particular, the top-side of the nozzle is in perfect condition, and enables us to interpret what remains of this part in our lamp. The shape of the lamp is



FIG. 2.—LAMP IN PALERMO, 270.

the same as before, but with one or two minor variations. First, the lateral chain-tubes have the same section as the back tube, whereas in our lamp they are a little different. Secondly, the back tube extends the whole height of the lamp, as ours does; but the side tubes stop before the bottom and



FIG. 3.—PALERMO, 270.

measure only 4.8 centimetres against the 6.3 of the back one. The lamp is larger than ours, for the width in front is 21.7 centimetres (about 8½ inches), and the height 7.2. The marble is possibly somewhat closer grained.

And now the head, which is almost perfectly preserved. Gàbrici thinks it a little earlier than the Palermo fragment, but it might equally well be a little later: any interval there may be must be trifling. The

main lines are the same as in our lamp and the Palermo fragment; and the treatment of the eyes is very like: but beyond that there are differences. The style is daedalic, as Gàbrici saw, but less centrally daedalic than in ours: it stands a little apart from the run of daedalic heads. Such faces are familiar from another quarter: Frenchmen, Flemings or Englishmen in the painting and sculpture of the fifteenth century. Layer-hair as before: but less ample; less bushy, lively, springy. Instead of the simple cord thrice coiled round the head, a broad band decorated with a row of spirals or curls and finished off below with a thin plain edging. The row of curls consists of a plain roundel in the middle, with three curls to left of it, and to right of it three more running the other way. The question is whether what we see is real curls, with a narrow band below them; or a broad headband consisting of two parts—a plain lower edging, and a row of spirals imitating curls. For the former, the seventh-century metope from Mycenae might be quoted, where a headband decorated with rosettes passes round the forehead, and above this the curls of the head, though damaged, are clearly visible.<sup>10</sup> But in the lamp the curls are very much more formal, so formal that I cannot think of them as real; and I believe that what we see is a broad headband with the likeness of curls wrought upon it: this is a common idea of head-decoration, and many examples might be given from different periods, both in antiquity and later.<sup>11</sup> A frontlet imitating human hair is worn by a woman on an Attic vase of the fourth century, and reappears in Hellenistic clay statuettes. Helmets were so decorated as early as the beginning of the fifth century.<sup>12</sup> I cannot give earlier examples,

<sup>10</sup> Jenkins (*Daedalia*, p. 21) speaks of 'a double row of curls on the Mycenae head,' and warns us that 'we should be wide of the mark in assuming that any form of head-band or fillet was represented'. The photographs (Svoronos, *Das Athener Nationalmuseum*, pl. 178; Poulsen, *Orient*, p. 151, fig. 178; Jenkins, pl. 6, 7; *Corolla Curtius*, pl. 7, pl. 9, 2 and pl. 10) might seem to show two rows of curls, but in the original the difference between curls above, and headband below, is distinctly marked.

In the Cretan head-vase Berlin 307 (*AM* 22, pl. 6; *Pfuhl M.u.Z.*, fig. 56; Neugebauer, *Führer: Vasen*, pl. 10, 1; Jenkins, pl. 6, 6) and the crude Rhodian head-vase in London (Maximova, *Vases plastiques*, pl. 30, 112; Jenkins, pl. 6, 3) a diadem like that of the metope is worn, but it covers the ends of the hair in front.

In the metope the heart, and the divisions between the petals, would be brought out in colour. In the vases the circles with centres are probably an abbreviation for flowers: if not, cf. the diadems *Olympia*, 4, pl. 18, 309 and pl. 19, 310.

Many rosetted diadems have been found, of gold or pale gold: in the more elaborate ones the rosettes are made separately and fastened to the foundation; in the less elaborate they are stamped. The rosettes fastened: Rhodes, from Camiros (*Cl. Rh.* 6-7, p. 55; found with late seventh-century vases); Reggio, from Ciro (Orsi, *Templum Apollinis Alaci*, p. 87;

fifth-fourth century); Berlin (*AM* 50, pl. 10; Hellenistic). Some fastened, some stamped: London 1160, from Camiros (Marshall, *Cat. of Jewellery*, pl. 13). Stamped: London?, from Cyprus (Murray, *Exc. in Cyprus*, pl. 8, 1: thirteenth century B.C.); Rhodes 13762, from Camiros (*Cl. Rh.* 6-7, p. 65, fig. 69; found with late seventh-century vases); Rhodes, from Ialysos (*Cl. Rh.* 8, p. 157; late sixth century); London 1154, from Camiros (Marshall, pl. 12); London 1157, from Camiros (Marshall, pl. 13); London 1217, from Aegina (*ibid.*); from Lousoi, *Jh* 4, p. 185. Rosettes for attachment to archaic diadems, some of them very elaborate: London 1220-32 (Marshall, pl. 14); New York, from Rhodes (Alexander, *Jewelry*, p. 46, fig. 99).

The gold bands with stamped rosettes recently found at Delphi (*BCH* 1939 pl. 30, 1) are not actual diadems, they are representations, since they formed part of chryselephantine statuettes; but owing to the groups of horizontal lines between the roundels, they preserve the look of a ribbon or bandelette of stuff to which rosettes of metal have been fixed.

<sup>11</sup> Hauser in *Jh* 9, pp. 75 ff.; Jacobsthal in *AM* 57, pp. 67-73. I do not take account of such frontlets when worn by non-Greek women, and omit the marble heads from Priene and the Mausoleum in case, as has been suggested, they should represent foreigners.

<sup>12</sup> See Hauser, *loc. cit.*

but I think this is the best explanation. I am assuming that curls are intended: a simple spiral pattern occurs on a bronze headband found at Olympia (*Olympia*, 4, pl. 19, 313).

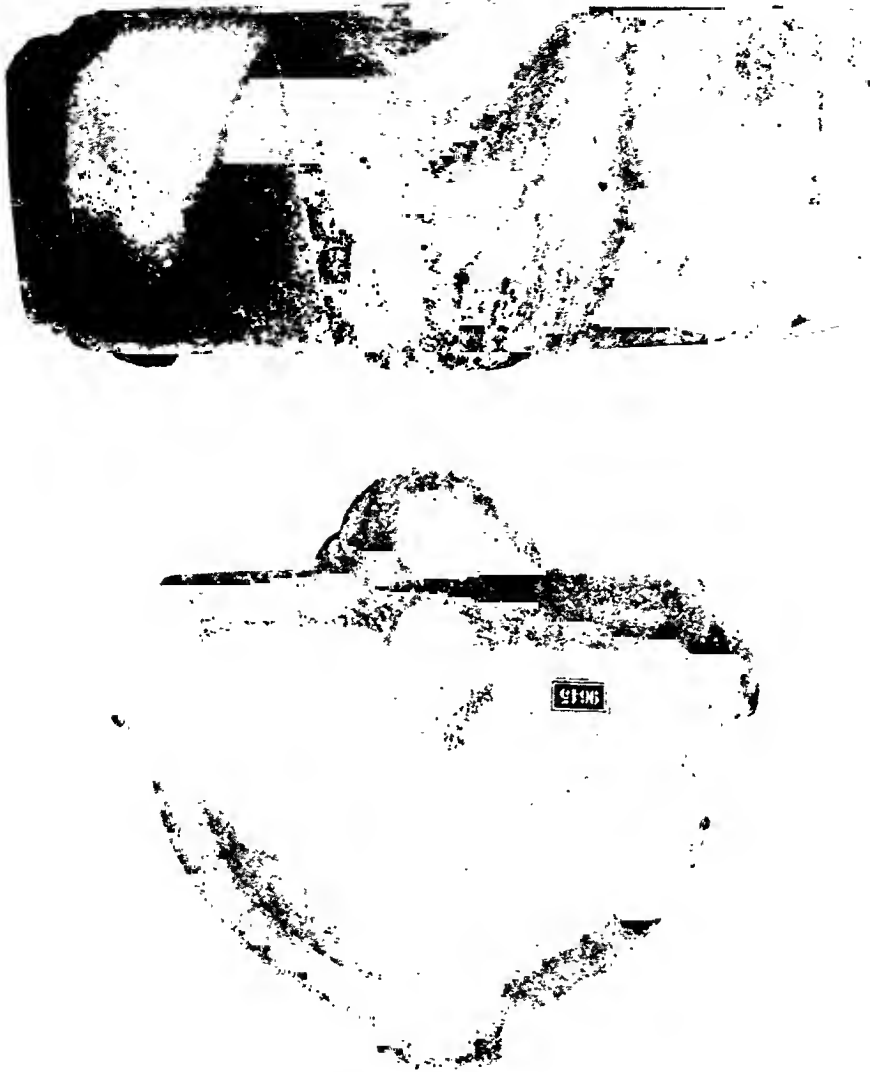


FIG. 4.—BERLIN. ETHN. MUS.

The headband is naturally not to be thought of as passing right round the head with the hair lifted and let fall over it. It is a frontlet only, secured by a string fastened to a hole or eyelet at each end: it is the string that goes round the sides and back of the head. Many such frontlets have been preserved, some of them contemporary with the lamp, and they usually have rounded ends with holes or eyelets.<sup>13</sup>

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<sup>13</sup> See note 10.

Seven other lamps are of the same type as these three, but simpler: for the nozzle, instead of being carved into a head, is plain.

4. One of these was found by Schliemann at Troy, not of course in a prehistoric stratum, and is now in the Ethnological Museum of Berlin (fig. 4). It is described by Hubert Schmidt in his catalogue of the Schliemann collection (*Trojanische Altertümer*, pl. 176, 3399), but not recognised as a lamp. The diameter is about 16 centimetres, the height 5.3. The material is the same as in our lamp. The iron remaining in the suspension-holes has split the lamp, and so discoloured it that at first sight it appears to be made of red marble. The back projection is a plain rectangle, the side ones are channelled vertically. The nozzle is flanked by thin rectangular bands in the nature of engaged pilasters, one on each side. The upper part of the nozzle is damaged by fire, as in our lamp. There is no engraved line on the rim of the pan.

5. A lamp very like this, and of the same marble, was found at Syracuse and is in the museum there under the number 43774. Orsi, who published it (*VSc* 1925, p. 207, whence our fig. 5),<sup>14</sup> reported that it was discovered in the grave of an adult in a cemetery which belongs to the seventh and sixth centuries. The diameter is 13.5 centimetres, the height 4. The nozzle has no side-pieces, and the topside of it is flat and plain. The projections have the same shape as in the lamp from Troy, but the back one is grooved as well as the others.

6. Miss Haspels drew my attention to another lamp in the same museum, also found at Syracuse, though not in the excavations of 1923-5, as it was formerly in the Old Museum. The marble is the same. The present diameter is 16 centimetres. The nozzle is broken off and the side-projections are damaged. The back-projection has three vertical grooves.

7. A fourth lamp of this shape, found at Camiros in Rhodes, and now in the British Museum, is figured by Walters in his catalogue (p. 22 fig. 20 no. 126, whence fig. 6), and here from a new photograph (fig. 7). The diameter is about 13.3 centimetres, the height 4.7. The marble is finer-grained than in our lamp, but Prof. Ashmole, who examined it with me, persuaded me that it might nevertheless be the same. The nozzle, as in the two lamps from Syracuse (nos. 5 and 6), is without side-pieces, but the upper surface of it has the engraved line. Each projection has three vertical grooves. The Camiros lamp was found in a tomb, and the excavator, Biliotti, has left an account of the other contents which will be quoted later on.

8. The fifth plain lamp is in the museum of Athens. It was found by the Italians at Hephaisteia in Lemnos, lying, as Professor Della Seta told me, on the floor of the sanctuary: the deposit is seventh or sixth century in character. The marble is the same as in ours. The diameter is only 9 centimetres. The nozzle has no side-pieces. The upper surface of it has an engraved line. Each projection has a pair of vertical grooves. The piercing is rough.

9. A small lamp of our type was found at Delphi, and is in the museum

<sup>14</sup> Already quoted by Gábrici in *Mon. Ant.* 32, p. 370, note 1.

there. It is figured by Perdrizet (*Fouilles de Delphes*, 5, p. 208, fig. 904, no. 700, whence our fig. 8) and compared with the lamp from Troy. The length is given as 14 centimetres, the height as 4.2. The marble, white, and not very coarse, seemed to be the same as usual, but I have not had the

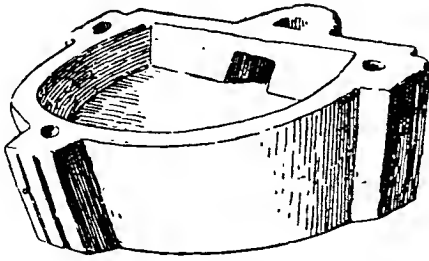


FIG. 5.—SYRACUSE. 43774.

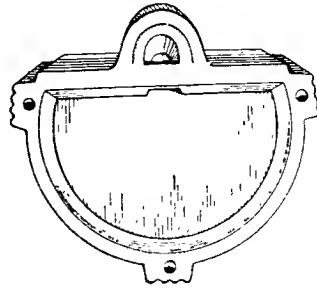


FIG. 6.—LONDON, 126.

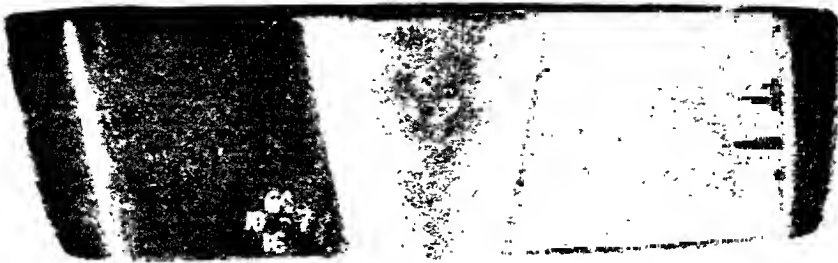


FIG. 7.—LONDON, 126.

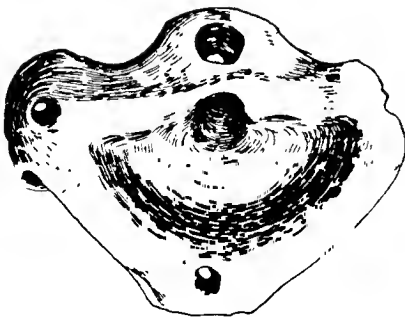


FIG. 8.—DELPHI.



FIG. 9.—PALERMO, 379.

lamp in my hands. The projections are but slightly grooved if at all. The front of the nozzle is broken.

10. Lastly, a fragment from the precinct of Demeter at Selinus, Palermo 379, mentioned by Gàbrici, and published here for the first time (fig. 9), is from a lamp of our type. The material is a fairly close-grained marble.



The fragment goes from one suspension-hole to another. Whether the nozzle was plain, or carved into a head, cannot now be determined.

To these ten semicircular lamps nine others, of a sister-shape, circular, must be added. It is a handsomer shape than the other, inasmuch as the circle is superior to a segment; and there is something floral about the designs. Some of these circular lamps have a hole in the middle, by which they might be set on a spike. Round lamps with central spike-hole are common in clay from the sixth century onwards. The semi-circular lamp, on the other hand, has very few analogues in clay or any other material.<sup>15</sup>

A. One circular lamp, Palermo 273 (fig. 10: *Mon. Ant.* 32, p. 163), comes from the same precinct of Demeter at Selinus as three of the semi-circular. It was found in the strata of the second megaron—that is to say, the shrine as rebuilt in the first half of the sixth century.<sup>16</sup> The diameter (without the nozzles) is 19 centimetres, the material the same as in our lamp. The circular pan is partitioned into three; if it was desired to save oil, only one of the compartments need be used.<sup>17</sup> There is a spike-hole in the middle. Two of the three nozzles are preserved, one plain, the other carved into the shape of a head. The nozzles alternate with projections which remind one of the suspension-tubes in the semi-circular lamps, but they are not perforated and are simply ornaments.<sup>18</sup> The 'front-views' of the lamp—with the nozzle in the middle—are very like those of the semicirculars. Further, the head, at first glance, recalls those we have been looking at; but a second glance shows that the resemblance is superficial: this is later, this is no longer the daedalic style.

B. A plain lamp of the same type was found by Hogarth in the sanctuary of Artemis at Ephesus, and is now in the British Museum (fig. 11; *Ephesus*, p. 320, fig. 100; Walters, p. 22, fig. 19). The diameter is 16.1 centimetres, the height 5.5, the marble the same as in our lamp. Spike-hole as before; the tripartite pan; the three nozzles; and the three projections, this time pierced for suspension as an alternative to pricking. Each projection has two vertical grooves, neater than in the last. The tops of the nozzles, as usual, are damaged by fire. The lamp is the circular counterpart of the plain semicirculars.

C. An unpublished fragment of a small circular lamp, found on the Acropolis of Athens and now in one of the magazines there, is of the usual material, and agrees with the lamp from Ephesus in having a central spike-hole and a divided pan: but there seem to have been four partitions, four nozzles, and no projections.

D. A circular lamp found in Samos, in the sanctuary of Hera, and

<sup>15</sup> See below, pp. 47-48. Two semicircular stone lamps from Cornwall, attributed to the end of the neolithic age, and a modern Eskimo one, are figured by Robins, *The Story of the Lamp*, pls. 7, a, 3, 5, and 8.

<sup>16</sup> Gábrici dates the second megaron 580-50 *Mon. Ant.* 35, p. 250, but the lamp itself not later than the first years of the sixth century (*Mon. Ant.*

32, p. 163).

<sup>17</sup> I ought to have made this observation myself, but I owe it to Jacobsthal.

<sup>18</sup> Compare the use of horizontal half-reels in bronze vessels: these often take swivel-handles, but sometimes they are imperforate, ornaments only (Furtwangler, *Olympia*, 4, p. 135; Buschor in *FR* iii. p. 266).

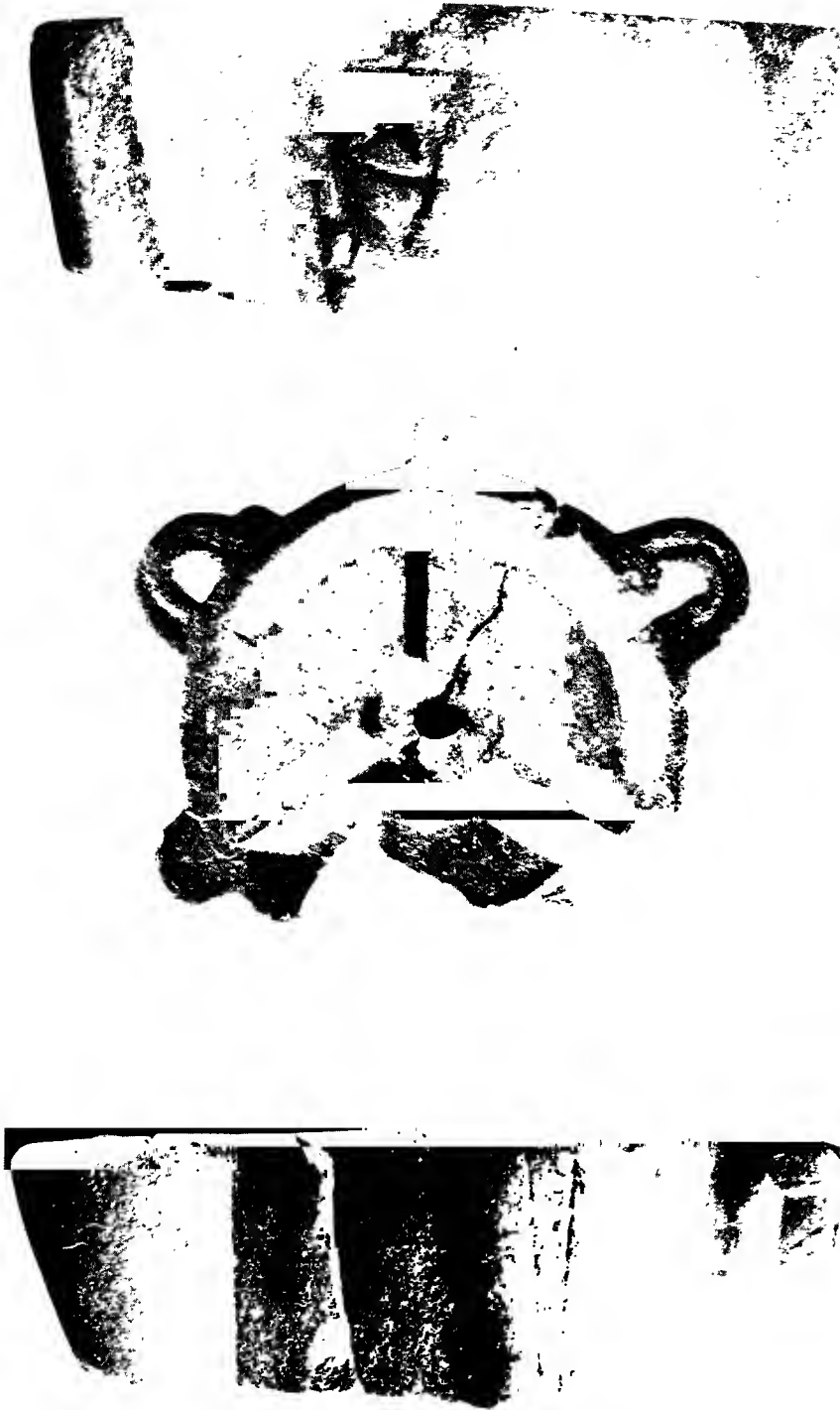


FIG. 10.—PALERMO, 273.

preserved in one of the museums in the island, agrees with A and B (Palermo 273 and the London lamp from Ephesus) in having a central spike-hole, three nozzles, three projections and a tripartite pan (figs. 12-13). The diameter (without the nozzles) is 21 centimetres, the height 7.3. I have not seen the original, and know it only from the photograph and drawings kindly given me by Prof. Buschor, who told me, if I remember rightly, that the material was a coarse-grained island marble like Naxian. I do not know whether all three nozzles are carved into the shape of human heads, or only one, as in Palermo 273. There is an engraved line on the top side of the rim and the partitions. The projections between the nozzles are not pierced. Their form is new: each consists of a pair of hour-glass-like members side by side, tied in the middle by a thin double band. I cannot tell the origin of this peculiar form: it recalls the pulvinus of the Ionic capital and divers bundle motives in Egypt and Mesopotamia, but it is none of these: it recurs in a lamp, akin to our class but not of it, which will be described later (p. 38 no. α). Prof. Buschor informed me that he did not mind how I dated the lamp, as long as I did not put it after Polycrates: for it was thrown away in the Polycratic period. What little remains of the head is seen to be post-daedalic, but still early.

E. A well-preserved lamp in Berlin, Conze 1062 (fig. 14), differs in one respect from the four circular lamps already described: it has the spike-hole, but the pan is not divided by partitions. There are three plain nozzles, distinctly carinated, with side-pieces; and three suspension-projections, roughly semicircular in section. The upper diameter is 14 centimetres, the marble the same as usual. This lamp was bought in Naples, and may therefore have been found either in South Italy or in Sicily.

F. A second lamp in Berlin, of the same marble, but rather greyer, comes from Ionia. The circle measures 16.3 centimetres. There are three nozzles and three projections, but no spike-hole. As in the last lamp, the pan is not divided; and as in Palermo 273 (p. 30 no. A), the projections are not perforated, are mere ornaments—the lamp stood, but could not hang. The rounded side-pieces of the nozzles stop before reaching the bottom, and look—must be intended to look—like locks of hair framing a blank face: they recall the ‘unknown divinities’ from Cyrenaica.<sup>19</sup>

G. A circular lamp found at Miletus, and belonging to our class, is in the museum of Smyrna. It is made of white marble, and the same sort as our lamp. The upper diameter is 10.2 centimetres. The general shape is as usual, but there is no spike-hole, and no projections for suspension, only three plain nozzles (one of them broken away). The nozzles, as in the first Berlin lamp, are distinctly carinated. The pan is not divided.

H. and I. Lastly, two small lamps in Palermo, both from the sanctuary of Demeter at Selinus, belong to our group, are of the same marble as ours, and are circular, but of different types from the rest. One, 376, published by Gàbrici (*Mon. Ant.* 32, p. 373, fig. 164), and from a photograph in fig. 15, is a kind of ‘introversion’ of a commoner type. The nozzle is at the centre, flanked by a pair of spike-holes. There is an engraved line on

<sup>19</sup> Ferri, *Dicmità ignote*: cf. *Soc. Magna Graecia*, 1931, pl. 15, 3, from Agrigento. See also p. 46.

top-side of rim and nozzle. The diameter is 11 centimetres, the height 2·4. Bottom and sides are corroded. The other, 377, published for the first time in fig. 16, has three nozzles. There is no real spike-hole, but a round cavity in the middle of the bottom, about half an inch deep, could take the



FIG. 11.—LONDON, 125.

spike. The cavity is a sort of omphalos, for a semi-spherical projection answering to it rises from the middle of the pan. This is a tiny lamp; the diameter without the nozzles is only five centimetres, or about two inches.

The ten semicircular lamps, and the nine circular, form a compact group. They are made of island marble, usually coarse in grain, sometimes

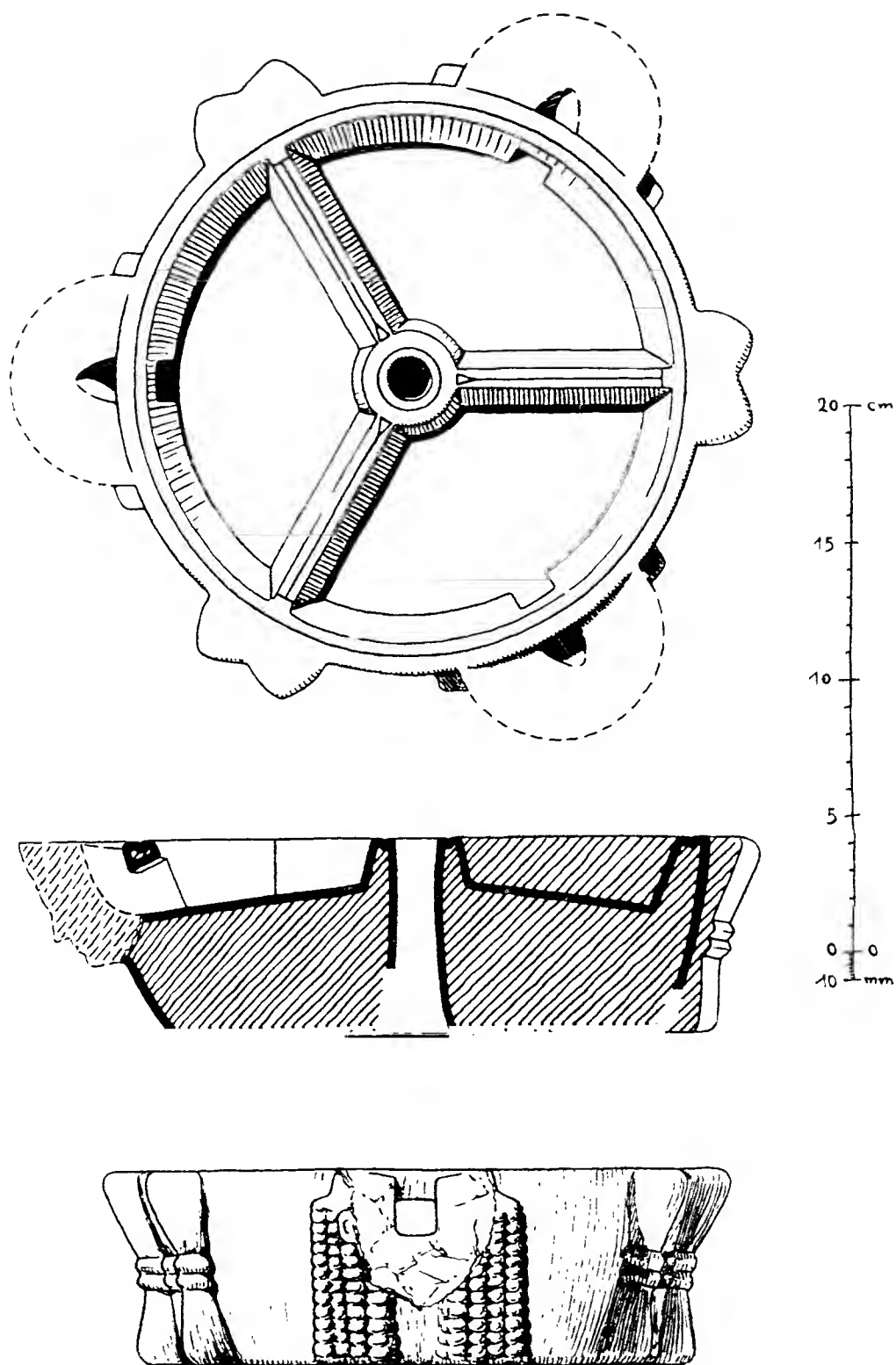


FIG. 12.—SAMOS.



FIG. 13.—SAMOS.

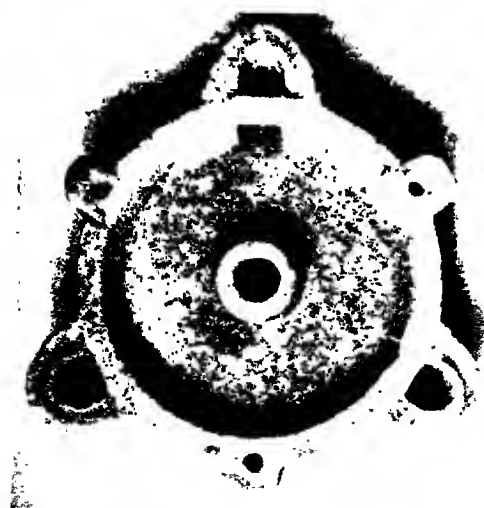


FIG. 14.—BERLIN, 1062.

less coarse, but not varying beyond what is possible in a single island, or even quarry. There are larger and smaller, plainer and more elaborate, earlier and later; and there are varieties of shape within the two great types: but they are all interlinked, and were probably made in one city and exported from there to every quarter of the Greek world. The nineteen are not the only archaic lamps in marble, for six others will be described presently, besides two in limestone and half a dozen in steatite: but these fourteen differ widely among themselves, and only serve as a foil to the dominant, 'classic', standard fabric, that of our lamp and its eighteen companions.

A look at the map will show the wide distribution of the standard fabric. Two were found in islands of the Aegean (one in Melos, one in Lemnos); six in Eastern Greece (one in Camiros, one in Miletos, one in Samos, one in Ephesus, one in 'Ionia', one in Troy); one in Athens and one in Delphi; eight, probably nine, in Western Greece (two in Syracuse, six in Selinus, and one 'bought in Naples' so probably from South Italy or Sicily). More may have been found: there are no doubt some that I have not seen, for instance in the local museums of Greece; moreover such objects, counting as 'miscellaneous antiquities', are apt to be neglected in publications and mislaid in museums; and fragments, especially, may well have escaped the notice of careless excavators. The production and export of these lamps must have been a considerable industry.

The lamps decorated with heads naturally offer more evidence for exact dating than the plain ones. On stylistic grounds, the three we began with—the semi-circular in Oxford (no. 1, pl. V and fig. 1), the fragmentary replica of it in Palermo (no. 2, pl. VI, 4), and the other semicircular in the same museum, no. 270 (no. 3, pl. VI, 1-3, and figs. 2-3)—must be considered the earliest of the lamps with heads. Now the two last were found at Selinus, which according to the testimony of ancient writers was founded about 628 B.C.<sup>20</sup> They may conceivably have been brought to the new foundation from the mother-city Hyblaeon Megara, but it is not very likely: they are probably not earlier than 627. Their style suggests that they are not very much later: for I think we may still count them true daedalic, and may suppose that they were made not too long after the peak of that art in the middle and the third quarter of the seventh century, and well before 600.

The circular lamp from Samos (D, figs. 12-13) must be later than these three, for the head is no longer daedalic. It was discarded, as stated above, in the time of Polycrates, and is therefore earlier than 520. On stylistic grounds it must be counted a great deal earlier.

The plain semicircular lamp from Camiros, London 126 (no. 7, figs. 6-7), was found in 'tomb F 73', and Biliotti in his journal gives the following description of the contents (I add the museum numbers of such objects as can be identified):—

'black amphora [64. 10-7. 1514].

1 black kylix lepaste [64. 10-7. 1569].

<sup>20</sup> Payne, *NC*, pp. 22-4. About 650 according to Diodorus. Recent discussion of the foundation dates

of the Western colonies, Byvanck in *Mnemosyne*, 4, pp. 185-206. See also Matz in *Gnomon* 13, pp. 406-7.

- 1 black cup.
- 1 marble shallow basin [64. 10-7. 1410: the lamp].
- 1 t.c. spindle-ring.
- 2 silver supporters.
- 1 metal button.'

The 'black amphora' is a kind of oinochoe in pseudo-bucchero, of local Rhodian fabric; the 'kylix lepaste' is an Attic lekanis of the middle or the third quarter of the sixth century. The nozzle of the lamp shows slight traces of burning, but the lamp is so well preserved that it can hardly have had much use before being placed in the tomb.



FIG. 15.—PALERMO, 376.



FIG. 16.—PALERMO, 377.

The general contexts of the other lamps, if known, are seventh and sixth century.

Such evidence, then, as there is would point to the fabric having lasted two full generations: from the last decades of the seventh century to the middle of the sixth or somewhat later.

The lamps were most probably made where the marble was quarried. The Parian marble used by ancient sculptors was called λυχνίτης or λυχνεύς, 'lamp marble', and according to Varro this was because it was 'quarried by lamplight in underground passages'.<sup>21</sup> Lepsius agrees with the derivation: but it is also possible that Parian was called 'lamp-marble' after lamps made of it which were exported all over the Greek world in early

<sup>21</sup> Omnes autem candido tantum marmore uti sunt e Paro insula, quem lapidem coepere lychniten appellare, quoniam ad lucernas in cuniculis caederetur, ut auctor est Varro. Plin. 36, 14.

ἡ δὲ λυχνίτης | ζωνὴ στυλοῦται πέζαν ἰωνι τύπωι. Epigram 3rd c. B.C., Guérard and Jouguet. *Un Livre d'Ecolier*, p. 20, 5; D. L. Page, *Greek Literary Papyri*, i, p. 450.

Ἰδρυτο δ' ἐν αὐτῷ τῆς τῶν βασιλέως συγγενείας ἀγάλματα εἰκονικά λίθου λυχνέως. Kallixeinos of Rhodes in

Athenaeus 5. 205 f.

τῶν σεμνῶν θεῶν τὰς μὲν ἐποίησεν ἐκ τοῦ καλουμένου λυχνέως λίθου. Clement of Alexandria. *Protr.* p. 41.

λυχνίας. Plato Comicus in Pollux, 7, 100 'the context shows that marble or the like is referred to and not a precious stone'.

Monumentum regis Mausoli lapidibus lychnicis. Hyginus, fab. 223.

λυχναῖος καὶ λυχνεύς' ὁ διαυγὴς λίθος. Hesychius. Probably refers to marble.



times. The case for this would be stronger if we could be sure that the marble of our lamps was Parian, and could not possibly come from any other of the Aegean islands. It is of the nature of Parian; is not Thasian; and does not, even at its coarsest, square with my notion of Naxian: but more I cannot say, others may speak with greater confidence.

It will have been noticed that the measurements of the lamps vary, and that there are no standard size or sizes. This is natural enough: they were made of good marble, but of scraps. Some of the scraps were square or nearly so, and circular lamps were made out of them. Others were rectangular, and it was more economical to fetch semicircular lamps out of these. Square or rectangular lamps would have been exposed to chipping at four corners.

It may be asked why the lamps were decorated with human heads. In some quarters the answer would come pat: the heads are apotropaic. It may be so: but I cannot convince myself of it. The fact is that heads, human or animal, are not very much used for decoration in the geometric period, although there are examples;<sup>22</sup> but in the succeeding period there are heads everywhere,<sup>23</sup> and I cannot attach any very profound significance to all of them. I dare say that the myriads of heads on Norman and Gothic corbels, bosses, brackets, dripstones, hip-knobs and what not have also been pronounced apotropaic, but I am not aware that this has yet been proved.

Even if no magic influence was attributed to it, the lamp must have been solemn enough, sole light in the darkness of a bare room, the white face crowned with fire.

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Let us now consider those early stone lamps that do not belong to our class. They will be found to be a mixed lot, presenting a great and instructive contrast to the homogeneity of the standard fabric. We begin with marble lamps, and afterwards pass to a few lamps in inferior stone—limestone, and the soft steatite.

#### *Marble.*

α. A lamp of island marble, found in Athens, on the Acropolis (3869: fig. 17), published by Payne and Young (*Arch. Marble Sculpture from the Acropolis*, pl. 17, 2) and with full description by Schuchhardt (in Schrader, *Die archaischen Marmorbildwerke der Akropolis*, p. 330, no. 451), has a special interest, because, as Payne observed,<sup>24</sup> it is one of the earliest pieces of marble sculpture—he might have said of stone sculpture—found on the Acropolis of Athens. The earliest periods of sculpture in stone—both the daedalic style, and even the style which succeeds it and is represented in other parts of Athens and Attica by Attic masterpieces like the Dipylon head, the boy in New York, and the youths from Sunium—are not represented

<sup>22</sup> Decoration of bronze tripods Benton in *BSA* 35, pp. 95-6; of clay pyxis-lids, *CF* Athens, III. H. d. pl. 1, 9.

<sup>23</sup> This may be partly due to influence from the

Orient, where heads were a favourite motive in decoration from very early times.

<sup>24</sup> In Payne and Young, p. 1. Compare Langlotz in Schrader, p. 9.

on the Acropolis by any considerable work, but only by a few lamps, of which this is the chief. It conjures up an Acropolis very different from the usual picture. The lamp is larger than most of ours, the upper diameter measuring 23·5 centimetres; and a good deal deeper, for the height is 11·7. Its three nozzles, all in the shape of human heads, alternate with three unpierced projections. The nozzles are unbridged, and there is no spike-hole. The aspect from above is not the same as in any of the other lamps, for the bottom of the pan, instead of being flat, is on different levels: in the middle of it there is a circular cavity with three deeper bays setting out from it and reaching the outer wall. The best-preserved head is much battered. The hair hangs straight down in three long locks at each side of the head. The pupils, as not uncommonly in archaic sculpture, were inserted and of

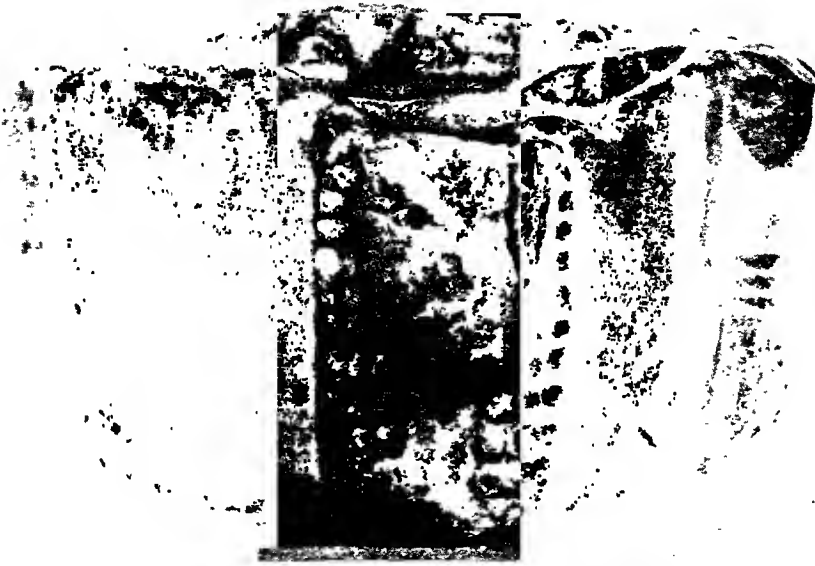


FIG. 17.—ATHENS, ACROPOLIS, 3869.

different material, some black stone. The projections are of the same curious form as in the lamp from Samos (D, figs. 12-13). The art of the heads is post-daedalic, and I took the date to be about 600: Schuchhardt says the end of the seventh. The style is different from that of the Samos lamp, which belongs to our class in the strict sense, whereas the Acropolis lamp is on the outskirts, and, though closely connected, hardly to be included.

Another lamp is from the same site:—

β. Athens, Acropolis, 190 (Payne and Young, pl. 17, 1; Schuchhardt in Schrader, p. 331, no. 452; our fig. 18), is of island marble, and circular. The bottom is not flat, but rounded. Four nozzles alternate with four projections for suspension. The human heads do not pertain to the nozzles (as in all the lamps hitherto described), but to the suspension-holes. The nozzles are in the form of animals' heads—twice a ram, and twice a creature which I cannot specify, but which has been surmised to be a goat. The

piercing of the human heads is rough and perhaps an afterthought. Iron remains in the holes and has stained and split the marble. The pan is partly covered in, with a large round opening which may have had a lid. This is the most hideous archaic work I have ever seen, and must be by an amateur. The date is the sixth century, and early in it.

Three other lamps, or fragments of them, were found on the Acropolis of Athens. I have not seen these, and take my information from Schuchhardt's catalogue.

γ. Athens, Acropolis. Schuchhardt in Schrader, p. 328, fig. 383, no. 450, whence fig. 20. The lamp is circular. The width is given as 25·7 centimetres. The marble is described as 'coarse-grained, probably Naxian'. Only the less interesting view is figured: it shows that the lamp does not rest on its bottom, but on a stand-ring. The pan is divided by partitions. There is no spike. There are three nozzles. As in the ugly lamp, it is not the nozzles that are head-shaped, but the projections between them. What remains of the faces—cheek and jaw of one—is not figured by Schuchhardt, who dates the lamp at the end of the seventh century, that is to say contemporary with lamp α.

δ. Athens, Acropolis. Schuchhardt in Schrader, p. 333, fig. 387, whence fig. 19. All that is left is a small fragment of pan, nozzle and chain-hole. The exact shape is uncertain. The marble is said, doubtfully, to be Pentelic.

ε. Athens, Acropolis, 225 and 226, two fragments, mentioned but not figured by Payne (Payne and Young, p. 67), one of them figured by Schuchhardt (in Schrader, p. 333, fig. 389, no. 453). The marble is said to be 'probably Naxian'. The shape is not circular, but apparently triangular, with a ram's head at each corner. Schuchhardt dates the fragments, which seem to be poor work from the picture, in the first generation of the sixth century. I suppose it is not quite certain, though probable, that they come from a lamp.

Our last marble lamp is of finer quality.

ξ. New York and Boston (pl. VII and fig. 21). The greater part of it is in New York, but one fragment is in Boston, and is replaced in New York by a cast. The New York piece is said to have been found in Thebes, but the provenience of the Boston fragment, which belonged to Furtwängler, was given as 'between Athens and Eleusis'. In any case the style is neither Boeotian nor Attic, but pure and good East Greek. The material is unusual. Miss Richter tells me that it not like any of the more familiar marbles, and looks as if it had no crystals. Indeed, the mineralogist whom she consulted thought at first that it was aragonite, and not calcite at all (like other Greek marbles): but when he examined it under the polarising microscope he pronounced it to be calcite, though of extraordinarily fine grain, with many crystals as tiny as a hundredth of a millimetre in diameter. It might be possible to locate this marble. The small photograph reproduced by Miss Richter in the *Guide to the Classical Section*, p. 79, shows the central spike-hole: part of the iron spike itself remains and is seen in our fig. 21, which gives the lamp from below. The outside is decorated in low relief. On one nozzle, a pair of lions, rampant, confronted, and roaring; on the second, a pair of



FIG. 18.—ATHENS, ACROPOLIS, 190.



FIG. 19.—ACROPOLIS, S. 454.



FIG. 20.—ACROPOLIS, S. 450.

birds, perhaps hawks, each perched on a plant consisting of a 'lotus-flower' and a 'palmette'; on the third, a pair of ram's heads.<sup>25</sup> These reliefs are bounded above by a plain fillet (omitted in the cast of the Boston fragment). To left and right of each nozzle there is an upright moulding, decorated with bead-and-reel pattern: this corresponds to the 'engaged pilaster' in many of the lamps of our group. The spaces between the nozzles are bounded above by egg-pattern. Each compartment is decorated with a pair of animals, standing on a ledge: in the first, sphinxes; in the second, sirens; in the third, griffins. The sphinxes look at each other, the griffins touch paws, the sirens shake hands.<sup>26</sup> The date should be the second half of the sixth century.

The marble lamp is essentially an archaic product. There are a few later ones, and a word may be said about London 127 (Walters, p. 22, fig. 21, whence our fig. 22), although it bears no relation to our class. The tip of the nozzle is missing: this is not stated in the catalogue. The handle is pierced vertically, so that it could be fastened to a rectangular hook in the wall. The lamp is not later than the Hellenistic period, and looks fairly early: it is said to be from Alexandria, and if it was found there as well as bought there, we should have a *terminus post quem*.

Another marble lamp was found recently in Samothrace (*AJA* 1940, p. 341, fig. 19), in the fill of the Arsinoeion, which was built in the second decade of the third century B.C. It is said to have two spouts: not clear from the reproduction how much of the second is due to the restorer.

That is the end of the marble lamps. There are two

### *Limestone lamps.*

L. 1. A fragment, 11 centimetres wide and 4 high, found not far from Pergamon (fig. 24 after *AM* 37, p. 340, Darier), in the cemetery district between the acropolis of Atarneus and the mountains to east of it—probably therefore from a tomb—takes us back very close to our standard class. It is either from a circular lamp with central spike-hole, or as looks more likely from the picture—I have not seen the original—from a semi-circular lamp. One of the suspension-tubes is well preserved, and there are perhaps traces of another at right angles to it. The stone is said to be limestone of Phocaea. The lamp was a local imitation, in inferior material, of our standard fabric.

L. 2. A limestone object from Vroulia in the south of Rhodes, figured by Kinch (*Fouilles de Vroulia*, p. 111, fig. 32), looks at first in the picture as if it ought to be a semi-circular lamp, but it has no nozzle, besides being much larger, and is described as a small basin, no doubt correctly: figs. 31a and 31b are rectangular objects of the same sort. A fourth thing found near there, in the market-place of the settlement (fig. 23 after Kinch,

<sup>25</sup> On pairs of ram's heads facing see Jacobsthal in *JRS* 29, p. 99. For the birds confronted but turning their heads away he compares the Attic hydria, from Analatos, in Athens *Jb.* 2, pl. 3., the Protocorinthian aryballos in Boston (*AJA* 1900, pl. 6: Payne, *Protokor.* pl. 11), the East Greek 'Daphni' situla in Rhodes (*Cl. Rh.* 3 p. 195; *CI* ii. Dm. pl. 1,

5., and a mirror, from Locri, in Reggio (*N. Sc.* 1913, suppl., p. 40).

<sup>26</sup> On sirens with arms see Haspels *Att. Bf. Lekythoi*, p. 158, note 2. For the lyre-like pair of tendrils under the griffins' forelegs compare, as Jacobsthal reminds me, the Tleson cup in Castle Ashby, *ABS* pl. 5, 1.

pl. 23, 13) and now, I suppose, in Istanbul, really is a lamp, although it has nothing to do with our class. It is made of 'greyish hard limestone

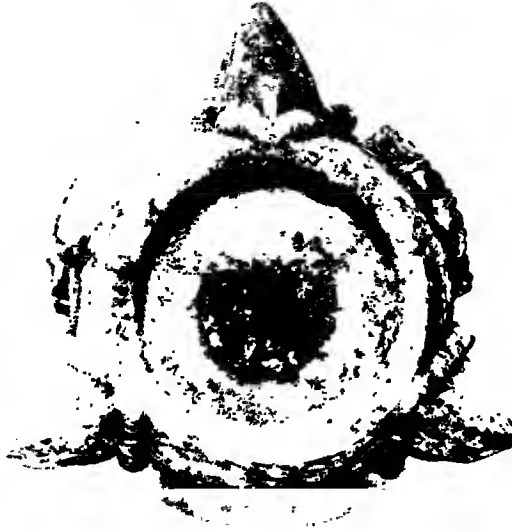


FIG. 21.—NEW YORK AND BOSTON.

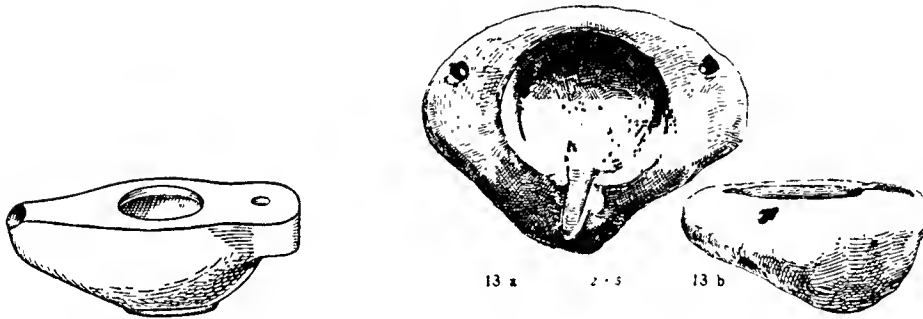


FIG. 22.—LONDON, 127.

FIG. 23.—VROULIA.

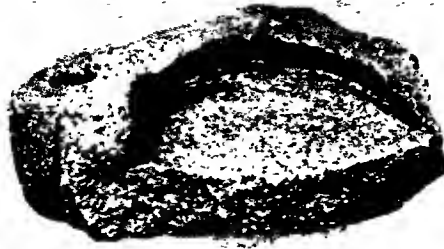


FIG. 24.—FROM NEAR PERGAMON.

(siderópetra) ? and is a rough little imitation not of a marble but of a clay lamp, circular, with an unbridged nozzle and a pair of holes for suspension. It would not be easy to date, but Vroulia is an archaic site, founded in the

middle of the seventh century and abandoned shortly after the middle of the sixth (Kinch, p. 90).

A large circular object of limestone, found at Himera, and now in the Museum of Palermo, is believed by Marconi to be a lamp (*Soc. Magna Graecia*, 1930, p. 157; Marconi, *Himera*, p. 125). It measures 48.5 centimetres across, including the nozzle or spout, and is unfinished, the spout not being hollowed away. There are two slab-like projections from the edge. To see what this would have looked like when completed, turn to an unglazed clay object, 37.5 centimetres across, found by Orsi in the sanctuary of Apollo Alaios at Cirò in Calabria, and now, I dare say, in the Museum of Reggio (*Templum Apollinis Alaei*, p. 122). The nozzle is hollowed out, and the projections have a reel-like finish. Orsi calls this a cooking-basin, and adds that similar vessels often occur in precincts and dwelling-places: he gives no references, but must be thinking of clay vessels such as he found at Gela (*Mon. Ant.* 17, p. 57, fig. 28 and p. 87, fig. 55, d), Camarina (*Mon. Ant.* 14, p. 803), and Heloros (*id.* p. 80, note 2), which do not look much like lamps, although Marconi must have the same things in mind when he says that 'large lamps similar to that from Himera, especially of terracotta, are not very rare in Greek sanctuaries and habitations'.<sup>27</sup>

Two later lamps of stone, both from Egypt, are in London. The kind of stone is not specified in the catalogue, and I have no note on the matter. London 128, from Tell-el-Yahudiyeh (Walters, p. 23, fig. 22), seems early Hellenistic; London 129, from Oxyrhynchos (Walters, p. 23, fig. 23), is probably also still Hellenistic. The shapes are clay-like and have nothing to do with our class.

There are six

#### *Steatite Lamps.*

S. 1. From Ephesus. Hogarth, in his *Ephesus* (p. 320, foot) mentions a fragment of a steatite lamp found near the round marble one belonging to our class (fig. 11; above, p. 30, no. B): rather smaller, but of the same type, with chevron pattern round the rim. This is not in the British Museum, and nothing is known of it beyond what Hogarth tells.

S. 2. Oxford 1894. 109, from Viano in southern Crete (Fig. 25, a and c and, from a cast, b) is of dark green steatite. The diameter is 12.7 centimetres (14.5 with the nozzle), the height 4.5. The lamp is circular, with a spike-hole, and a single nozzle, which is carved into the form of a grotesque human head. The chin is much rubbed; parts of nose and mouth are lost. The head at first glance looks negroid, but it is not a negro's. A pygmy? or rather than a pygmy a dwarf? The style is curious, and may have a non-Greek tinge. The date should be sixth century.

<sup>27</sup> A group of blue fayence objects, something like these, have also been taken for lamps, but this is not certain: (1-4) Alexandria 18930, from Alexandria (Breccia *Néc. di Sciatbi* p. 81) and three others from the same site: (5-6) Cairo 18012 (von Bissing, *Fayencegefasse*, p. 98, 1) and 18011: (7) once in the Macgregor collection, so no doubt from Egypt (Wallis, *Macgregor Coll.* p. 85, no. 183; quoted

by Breccia): (8) Tunis, Musée Lavigerie, from Carthage (Delattre, *Néc. punique voisine de Sainte-Monique*, 2<sup>e</sup> semestre des fouilles, 1898, p. 14, fig. 27); (9) Cagliari?, from the Punic cemetery of Predio Ibba near S. Avendrace in Sardinia (*Mon. Lincei*, 21, p. 132, fig. 41, 2, and p. 154, fig. 59). The date is given by the occurrence in the Chatby cemetery of the late fourth and early third centuries B.C.

S. 3. Oxford 1938. 1163 (fig. 26) is also from Crete, probably Cnossos. The material is the same as in the last, but the lamp is semicircular and is evidently copied from semicircular lamps of our class. The width is at present 10.5 centimetres, was over 11, the height is 4.5. Two of the suspension-tubes are broken, the third well-preserved. The nozzle has three holes, a larger between two smaller, as if for three wicks.

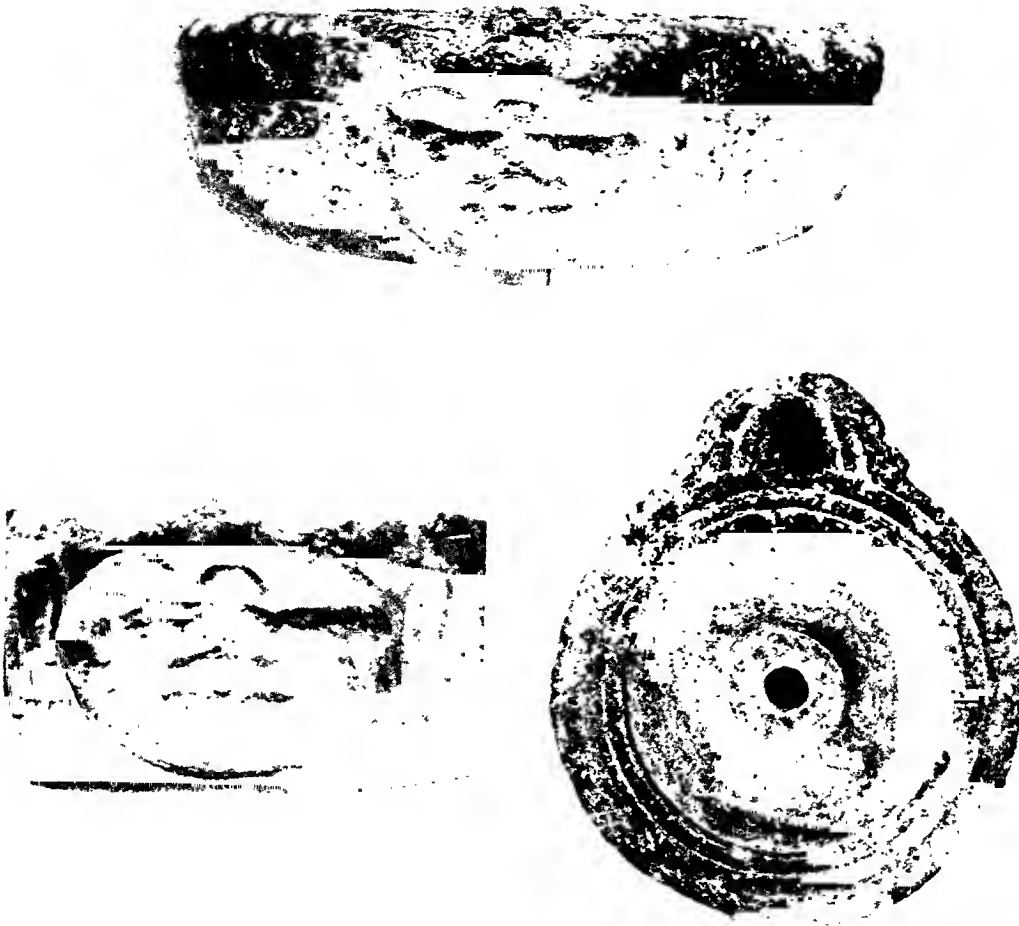


FIG. 25.—OXFORD, 1894. 109.

S. 4. Berlin, from Ionia. The lamp is circular, with four spouts rudely carved into the form of human heads. There is no spike-hole. The colour of the steatite is a slate-grey. Sixth century.

S. 5. Berlin, from Ionia. The lamp is semicircular; and 'introverted'—for instead of protruding nozzles there is a row of three cavities in the pan itself, near the straight side, to take the wicks. Zigzags on the front recall the 'chevrons' mentioned by Hogarth when speaking of the steatite fragment from Ephesus (p. 44, no. S. 1). The date is sixth century, might even be late seventh.



S. 6. The sixth and last steatite lamp was found at Olynthos (Robinson, *Olynthos*, 2, fig. 301, 32) 'in trench 6 together with rf. vases so that it must date from the fifth century'. Like the limestone lamp from Vroulia, it has no connexion with our marbles, being a coarse imitation of a well-known type of clay lamp.

That brings the tale of stone lamps to a close. One bronze lamp, and one clay, call for mention, because of their affinity to the stone lamps.

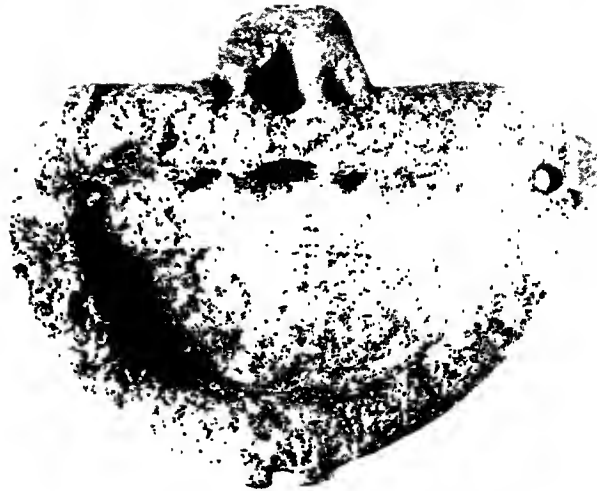


FIG. 26.—OXFORD, 1938. 1163.

The bronze lamp, Berlin inv. 30921, was found in Etruria and is doubtless Etruscan (fig. 27). The diameter is about 11·7 centimetres. There are three nozzles, each flanked by pairs of uprights scored with slanting lines, which gives the nozzle the appearance of a featureless face between long locks of hair. The same effect was given, it will be remembered, in one of the marble lamps belonging to our class (p. 32, F), where it was certainly intentional; and the Etruscan will have taken it from a Greek lamp. Between the nozzles are bulls' heads, with a suspension-ring above each: so the lamp might either stand, or be supported from below, or swing by chains. These heads are flanked by rosettes, each consisting of four incised

circles with a raised heart. On the rim, above each nozzle, there is a horizontal projection decorated with bead-and-reel. The spike-hole is not perforated, but blocked half-way. It looks as if something was meant to be fixed into the cylinder above, as well as something below, and this may be borne out by the archaic Etruscan bronze lamp in Naples,<sup>28</sup> in

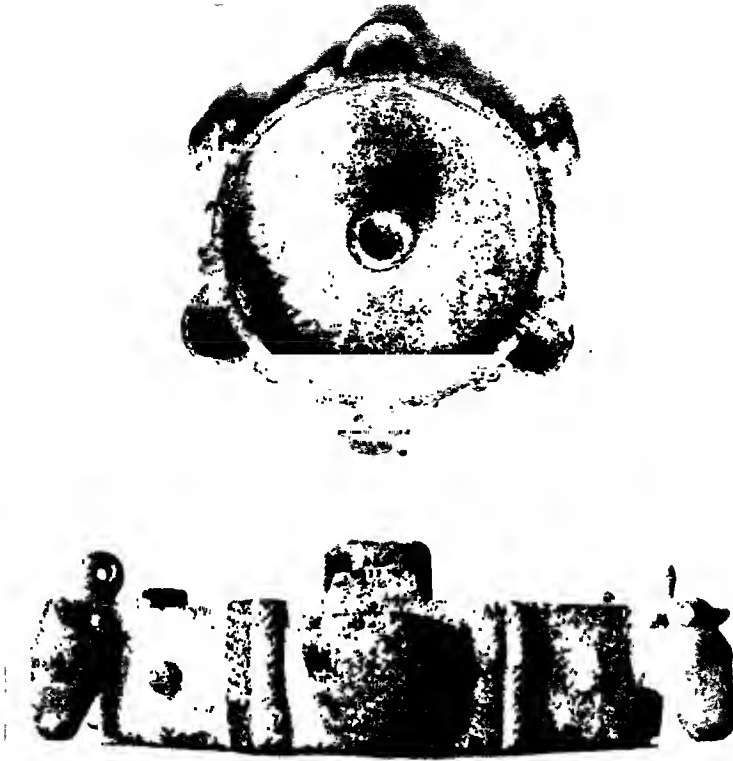


FIG. 27.—BERLIN INV. 30921. BRONZE.

which from a central tube a column rises surmounted by the figure of a siren. No need to linger over the Naples lamp, which is not of our type: but its three nozzles, and its ornament in the form of a satyr's head, are a far-off echo of our marble lamps.

Lastly, a clay lamp. It was said above that although circular lamps with central spike-hole were common in clay, semi-circular lamps in clay are almost unknown. Indeed there seems to be only one, and a piece of a second. Both are in the Musée Alaoui, Tunis, and were found at Carthage in the Punic cemetery of Ard-el-Kheraïb. The complete lamp, which measures 21 cm. by 15, is published by Merlin and Drappier, *La nécropole d'Ard-el-Kheraïb*, p. 54, above, and from photographs in the first supplement

<sup>28</sup> 72198 (Ruesch p. 368 no. 1622): *Mus. Borb.* 15, pl. 22. From the Borgia collection at Velletri. It seems doubtful whether the lion-paw base figured with the lamp belongs (Burrows and Ure in *JHS* 31, p. 94: the inventory number is different (72324), and it is missing in De Angelis' reproduction (Tarbell, *Cat. of Bronzes in the Field Museum*, pl. 41, fig. 17). On the

other hand the type of base is archaic, and a bronze lamp in Berlin (our fig. 30) has a very similar one. The satyr-head is perhaps to be compared with that of the infundibulum from Capua in Berlin and Copenhagen put together by Miss Sauer (*Ant.* 1937 pp. 285-308: Rius in *From the Collections of Ny Carlsberg*, 2, pp. 153-5).

to the catalogue of the *Musée Alaoui* (pl. 94, no. 722). Fig. 28, and most of the following descriptions are taken from Merlin and Drappier. The clay is reddish. The front is furnished with seven plain nozzles, and decorated with four female heads, one at each corner and two in the middle. That is all the plastic decoration: but there are also embellishments in brownish paint: on the front, an alternation of rounds and uprights suggesting the metopes (perhaps decorated with shields) and triglyphs of a Doric frieze; and inside the bowl itself—not seen in the reproduction—two palm-trees with clumps of dates, and a bird. The fragment of the second lamp (Fig. 29, after Merlin and Drappier, p. 79, fig. 53) comes from another tomb in the same cemetery: what remains is one corner, with plastic decoration—the head of a man with long hair and beard: here also there are traces of brown paint. The heads on these two lamps would not be easy to date by style alone: all that could be said of the female heads would be that they are of free style, with a dash of Punic; of the male head, that there is nothing particularly un-Greek about it, and that it could not be earlier than the fourth century. Happily there is external evidence. Mr. Merlin has shown, from the other finds, that the cemetery of Ard-el-Kheraïb was in use from the end of the fifth century to the end of the fourth.<sup>29</sup> As the tomb with the complete lamp would seem to be one of the earlier, that with the fragment one of the latest,<sup>30</sup> it almost looks as if clay lamps of the semicircular shape, decorated with heads, were made at Carthage over a considerable period of years. In any case there must be a connexion between these and the archaic Greek lamps of stone: but a link is at present missing.

We began with the golden lamp of Athens, and return to it for a moment in conclusion. No golden lamps have reached us from antiquity.<sup>31</sup> We read of one famous golden lamp. It was Athena's, like the other; was seen by Pausanias on the Acropolis of Athens, in the Erechtheum—near that 'house of Erechtheus' to which Athena, in the Odyssey, repairs;<sup>32</sup> and was the work of the sculptor Kallimachos.<sup>33</sup> As to lamps of other metal, there are plenty of bronze lamps from the Roman period; but not many earlier, and most of these are of the simplest description. One of the earliest, however, shows fancy (fig. 30). It comes from the sanctuary of Pan, as it is believed to be, on Mount Lykaion in Arcadia, is now in Berlin,<sup>34</sup> and

<sup>29</sup> The bronze oinochoe Merlin and Drappier, p. 56 (*Mus. Alaoui*, suppl. i. pl. 60, 68; see also Neugebauer in *RM* 38-9, p. 348) is earlier, and may have been in the house for some time; so may some of the scarabs.

<sup>30</sup> At least, while the vases found with the fragment are of late type, the clay pyxis accompanying the complete lamp recalls Corinthian work of the fifth century, and Attic dishes like Merlin, pl. 5. 48, appear in Camiran graves with vases of the fifth century (*Clara Rhodos*, 4, p. 116, lekythos by the Aischines painter; *ibid.* p. 166, late fifth-century amphoriskos, or even of the late sixth (*ibid.* p. 96, bf. oinochoe).

<sup>31</sup> So I wrote, but see now that Paribeni, in *Atene e Roma* 5 (1902), p. 45, alludes to a golden lamp from

Pompeii in the Museum of Naples.

<sup>32</sup> *Od.* 7, 81.

<sup>33</sup> Paus. 1, 26, 6. Jacobsthal, *Orn. gr. Vasen*, pp. 99 ff. It is likely enough that there had been an ever-burning lamp on the Acropolis from very early times, and that the sumptuous lamp of Kallimachos replaced a simpler one.

Dr. Pfeiffer refers me to Euphron in *Berl. Klassiker Texte* 5, i. p. 58, 3 and the passages from Nonnus quoted there by Wilamowitz.

<sup>34</sup> Inv. 10787, from Hagios Sostas: Neugebauer, *Bronzegeat des Altertums*, fig. 10; Neuburger, *Technical Arts of the Ancients*, p. 238, fig. 308. For the general shape cf. the clay lamp from Olynthos, *AJA* 1939, p. 75, fig. 40 above.

cannot be later than the middle of the sixth century. The general shape is the same as in one of the commonest types of clay lamp, but the body is set on a lion-paw base and has a handle in the form of a Triton. The decorative notion is a favourite one in Greek metal-work, appearing in many forms: vessels with men or animals stationed at the rim, and looking



FIG. 28.—TUNIS.



FIG. 29.—TUNIS.

curiously over it into the liquid.<sup>35</sup> In the lamp from Arcadia, the oil figures a still pool or lagoon near the sea-shore; by the pool are large lily-like flowers such as grow readily in marshy places. On the land side, a fire has been lighted; two serpents are basking at it, for serpents are chilly creatures; and from the sea, a merman swims up, and stops to look at the flame. That is as near as we can get to the Odyssey and Athena's golden lamp.

J. D. BEAZLEY.



FIG. 30.—BERLIN INV. 10787. BRONZE LAMP.

<sup>35</sup> See Hanfmann, *Altetruskische Plastik*, i. pp. 38-9.

## SOME NOTES ON EARLY ATTIC STOICHEDON INSCRIPTIONS

‘It is a tempting suggestion that it was the engravers of such texts—that is, either the sculptors themselves or the engravers employed by them—who were the pioneers of the new style’ (see below, Notes I, II and IV).<sup>1</sup> This passage in Austin’s book encourages me to say that every study of the early stoichedon documents of Attica must begin with the dedication of Nearchos signed by Antenor (see Note III).<sup>2</sup> When considered in connexion with all known examples of the period, this inscription assumes a significance which is not apparent when it is studied in connexion with the list which Austin has recorded (p. 7), intentionally incomplete as that list is (see Note IV). The ‘lamentably fragmentary state’ of the greater part of these private dedicatory inscriptions (Austin, p. 64) cannot deter us from a careful examination which leads, as a rule, to the reconstruction of the monuments as well as to reasonable restorations of the inscriptions.<sup>3</sup>

The clear distinction between dedicatory inscription and artist’s signature is no peculiarity of the monument signed by Antenor, though the fact that both inscriptions are stoichedon, with the stoichoi independent of one another, shows the fully developed stoichedon style, as does the disregard of the syllabic division (see Note V).

Several reasons for the beginning and development of the stoichedon style in Attica have already been put forward and discussed by Austin (pp. 4 f. and 119); we may cite as an additional one a purely technical detail which has, perhaps, little significance as ‘an outflowing of Greek feeling for beauty.’ It is again the dedication of Nearchos, signed by Antenor, which prompts the suggestion that the vertical striation of the front face facilitated the engraving of the stoichedon inscription (see Note VI).<sup>4</sup>

The date proposed by Austin, p. 9, for the dedication of Nearchos is ‘the later part of the sixth century’; the argument advanced by Miss Gisela M. A. Richter seems to support a date as late as 520, since Antenor may have left Athens after the attack on Hipparchos, partly for his own safety, partly to conduct the building of the temple in Delphi.<sup>5</sup> This date

<sup>1</sup> R. P. Austin, *The Stoa of the Athenians*, p. 10; see also p. 119; F. Lowy, *Sb. Akad. Wien*, 216, Abh. 4, 1937, pp. 10 f., draws some conclusions from the differences between dedicatory inscription and artist’s signature on the same monument; see also R. Heberdey, *Epigraphica Nauplia*, p. 76; C. D. Buck, *C. P.*, viii, 1913, pp. 133 ff.; S. Lauffer, *Abh. Mitt. Kh.*, 1937, p. 100 (the reference to this article will be henceforth abbreviated to: Lauffer).

<sup>2</sup> Austin, p. 6.

<sup>3</sup> There are some more stoichedon inscriptions prior to 480 B.C., though of minor importance:

*IG* 1<sup>2</sup>, 676, 681; cf. Lauffer, p. 88, 692 — Loll, 299 (cf. *Z. f. d. Kl.* cols. 36 f., 777; cf. the similar, though non-stoichedon, inscription published by O. Broneer, *Hesperia*, iv, 1935, p. 148, no. 1, fig. 37, 990, Loll, 293 — *EM* 12945; cf. Lauffer, pp. 101 f.).

<sup>4</sup> Cf. J. Kirchner, *Insignes*, pl. 3, no. 10.

<sup>5</sup> *AJ.A.* xli, 1937, pp. 162 f.; cf. E. Lowy, *Scritti in onore di B. Nizari*, p. 240; B. D. Meritt, *Hesperia*, viii, 1939, p. 62, no. 21; E. Lowy, *Sb. Akad. Wien*, 217, Abh. 2, 1938, p. 38; E. Langlotz, *Die Kynen*, pp. 80 ff., no. 38.

does not interfere with our suggestion, mentioned above (and Note III), that it may have been Antenor who initiated the stoichedon style. Admittedly the development of script may have encouraged the invention of the stoichedon style, but it was not the sole cause. There is no example of stoichedon order which we have yet discussed that is earlier than the proposed date of the Antenor inscription, and not until the Hekatompedon inscriptions (*ca.* 485 B.C.) do we find one which can be compared with it.

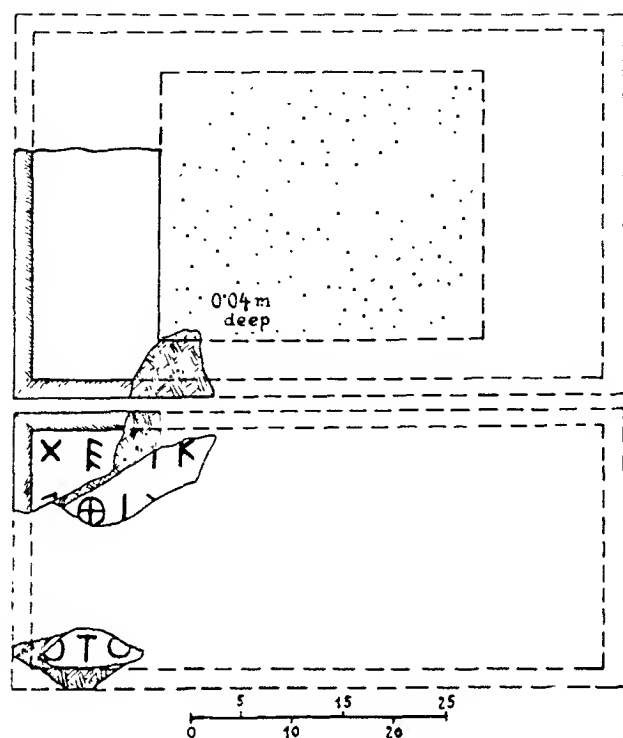


FIG. 1.

There is, however, one inscription, not yet mentioned, which may refute our assumption; it is engraved at once stoichedon and boustrophedon.<sup>6</sup> There are only three small fragments preserved (fig. 1 : two of them join, *IG* i<sup>2</sup>, 665 and Loll. 292 *EM* 6454 ; the third, Loll. 331 *EM* 6492., belongs to the lower left-hand corner of the base, since the smooth bottom and a small part of the left lateral face are preserved.<sup>7</sup> This fragment belongs, therefore, to the last line of the inscription, which was, according to our restoration, the fifth. The first and the fourth preserved letters of the second line indicate that the inscription was engraved boustrophedon. The smooth bottom preserved on Loll. 331 proves that at least this part of the bottom was to be seen. We can, therefore, assume that our base was

<sup>6</sup> This reference to a single example of a stoichedon and boustrophedon inscription does not clash with Austin's observations on pp. 21 f.: cf. the illustration of the Hekate altar from Miletus. A. Rehm, *Handbuch*

*der Archäologie*, i, p. 216, pl. 27, 1.

<sup>7</sup> Cf. *Arch. Akad. Wien*, 1930, p. 39, no. 14; Lauffer, pp. 95 f.

the capital of a pillar and belongs, together with several other bases, to a class of monuments first detected by W. B. Dinsmoor.<sup>8</sup> The inscription is framed within a three-quarter round moulding, and almost all bases belonging to this class have the inscription or the relief within a frame. The round moulding, as well as the shape of the *chi*, indicate Ionic influence, and it seems to be very difficult, though possible, to date this inscription later than the Nearchos dedication.<sup>9</sup> We cannot decide whether or not our inscription is a forerunner of the Attic stoichedon style. Thus, the question of the origin of the stoichedon order cannot yet be answered. But of the great number of examples we may consider the dedication signed by Antenor as the most significant representation of the early Attic stoichedon style.

#### NOTE I

If the Salamis decree and the Hegias base are engraved by the same hand (*Oesterr. Jahresh.*, xxxi, 1938, Beibl., cols. 39 ff., fig. 9; the reference to this article will be henceforth abbreviated to: *ŽAW*), it is likely that it was an employed mason, not the artist, who made both inscriptions; cf. Lauffer, p. 98. Very similar, possibly also by the same hand, is *IG* i<sup>2</sup>, 659; cf. O. Broneer, *Hesperia*, iv, 1935, p. 152, no. 4, fig. 40. The inscription of the Hegias base, though non-stoichedon as a whole, shows stoichedon order in the last five letters of the first and second lines. Compare the vertical alignment of E and + in this part of the Hegias inscription with the alignment of the same letters in the fourth place of the first and second lines of *IG* i<sup>2</sup>, 1. For the omission of the *spiritus asper* in the name of the artist Hegias compare C. D. Buck, *Cl. Phil.*, viii, 1913, pp. 140 and 143, note 1; Roberts and Gardner, *Introduction*, ii, p. 437, no. 188. The date proposed for the Salamis decree (*ŽAW*, cols. 40 f.; see the new fragment published by E. Schweigert, *Hesperia*, vii, 1938, p. 264, no. 1, fig. 1) can now be supported by the interpretation of this decree as a regulation providing for 'an exchange of inhabitants and property,' to quote M. P. Nilsson, *AJP* lix, 1938, p. 387. It was perhaps the land owned by the family of the tyrants (cf. U. Kahrstedt, *Staatsgebiet und Staatsangehörige*, pp. 26 ff.) that was given to the Salaminians after the expulsion of the last members of the family in 488/7 B.C.; cf. H. Friedel, *Der Tyrannenmord*, pp. 39 ff.; B. D. Meritt, *Hesperia*, viii, 1939, pp. 62 ff., no. 21; A. E. Raubitschke, *AJA* xliv, 1940, p. 58, note 2.

#### NOTE II

Austin noticed the close connexion between the Hekatompedon inscription and the Marathon epigram (p. 10). There is, moreover, a

<sup>8</sup> *AJA* xxvii, 1923, pp. 23 f., fig. 1; cf. *ŽAW* cols. 52 and 61.

<sup>9</sup> There are two other comparable boustrophedon inscriptions: *IG* i<sup>2</sup>, 976 and *SEG* iii, no. 55. The former belongs to the second, rather than the first, quarter of the sixth century. This date may be

right also for Phaidimos; cf. A. Rumpf, *Critica d'Arte*, xiv, 1938, p. 47. These two pieces seem much earlier than our boustrophedon inscription. A late boustrophedon example from Miletus was illustrated by A. Rehm in *Handbuch der Archäologie*, i, pl. 28, 1.

third stoichedon inscription which belongs to this group, *IG* i<sup>2</sup>, 645 (Austin, pl. 2b), as has already been pointed out by L. C. Spaulding, *AJA* x, 1906, p. 104, fig. 10, and by A. Wilhelm, *Anz. Akad. Wien*, 1934, p. 111. This inscription, belonging to a private dedication, seems to be earlier, but it is possibly by the same hand; cf. Lauffer, p. 98. Furthermore, *IG* i<sup>2</sup>, 645 joins *IG* i<sup>2</sup>, 497 (see fig. 2). Both fragments were found at the same site and during the same campaign (*IG* i, s. pp. 100, no. 373<sup>206</sup> and 103, no. 373<sup>224</sup>). *IG* i<sup>2</sup>, 497 is a rectangular base with a circular cutting on its top. Shortly after its excavation this base was connected with the column which bears the inscription *IG* i<sup>2</sup>, 585. The lost upper part of the base was restored in plaster, and the inscribed face was turned against the wall of the museum yard. Thus, an examination of the base, and especially of the inscription, was impossible. *IG* i<sup>2</sup>, 585, however, was never understood as belonging to the base, and it was even tentatively suggested that the base belonged to the dedication of Euthydikos (cf. *AJA* xiv, 1940, p. 56, note 3). My assumption that

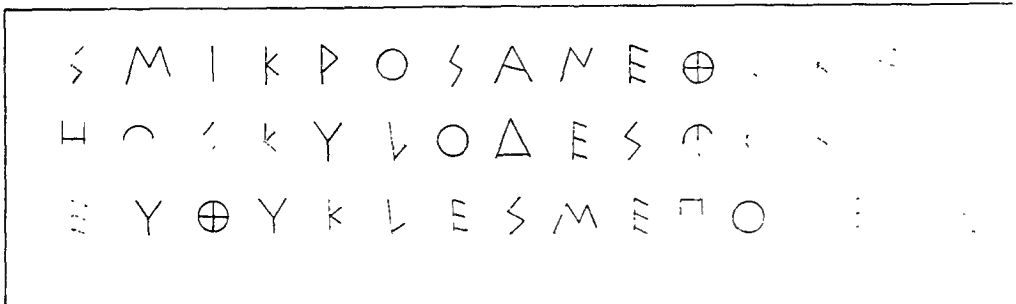


FIG. 2.

*IG* i<sup>2</sup>, 497 and 645 belong together was confirmed by a thorough examination of both fragments by Miss Anne Jeffery. We gain from this connexion a stoichedon inscription of three lines. The restoration [E]ϋθυκλῆς μ' ἐπο[τεσε] without the *nu ephelkystikon* has been made in order to maintain, as far as possible, the stoichedon order; cf. Lauffer, p. 100, no. 14. The base with the dedicatory inscription of the tanner Smikros and the signature of Euthykles bore in its circular cutting on the top a column which may have supported a marble statue. It may be mentioned that we have still a fourth inscription, closely related with this group, the so-called 'list of Athenian citizens' (presumably clerouchs); see Picard and Reinach, *BCH* xxxvi, 1912, pp. 330 ff. (with photographs); A. Lamer, *RE* xii, col. 1905, 7 ff.; A. Wilhelm, *Anz. Akad. Wien*, 1934, p. 111; K. Lehmann-Haupt, *Klio*, xxviii, 1935, p. 187; H. Berve, *Miltiades*, p. 51; Meritt, Wade-Gery and McGregor, *The Athenian Tribute Lists*, p. 511; V. Ehrenberg, *Eunomia*, i, 1939, p. 21. Provided this inscription, a part of which shows the stoichedon order, was engraved by the same hand as the other three pieces mentioned above, it may be doubted whether it actually belongs to Lemnos. Perhaps it was brought from Attica to Lemnos in recent times and was once part of an early Attic public funeral list. Pausanias says (i, 32, 3) that the names of the dead of Marathon were engraved on *stelai* κατὰ φυλὰς. Follow-



ing Austin, I suggested above that it was not Hegias himself who engraved the Salamis decree as well as the inscription on the joint dedication of Aristion and Pasias. We also have no reason to suppose that Euthykles engraved all these inscriptions, which probably belong to the same hand. There is, however, the inscription from the base which bore the statues of Harmodios and Aristogeiton made by Antenor; cf. *AJA* xiv, 1940, p. 58, note 2. This inscription is engraved by the same hand as the public grave epigram of the year 497 B.C. (cf. *AJA* xiv, 1940, p. 58; P. Friedländer, *Studi ital. di Fil. class.*, NS xv, 1938, pp. 89 ff.) and is similar to the Leagros dedication (*Hesperia*, viii, 1939, pp. 160 ff.), to the dedication of Thrasyllus and Gnathios (A. S. Arbanitopoulos, *Epigraphiké*, p. 117, fig. 85), and to *IG* i<sup>2</sup>, 745 (B. D. Meritt, *Hesperia*, v, 1936, p. 358, note 2). But no similarity can be detected between these inscriptions and the inscription on the Nearchos monument (*IG* i<sup>2</sup>, 485), though this monument is actually signed by Antenor. Wace suggested, however, that Antenor may have made only the wooden 'patterns' from which the first tyrannicides were cast (*Arch. Anz.*, 1938, pp. 369 ff.). It was perhaps Nesiotes who cast the one group as well as the other. That would explain the similarities of several inscriptions (*Jahreshefte*, xxxi, 1938, Beiblatt, vol. 44). We notice chiefly that none of these inscriptions mentioned above is engraved stoichedon. There is, however, an explanation for the disregard of the stoichedon order in the inscriptions from the monument of the tyrannicides and the public grave monument. In both cases the engraver intended to fill each of the lines with a whole elegiac, leaving no space at the end of the lines. The same arrangement was made in engraving *IG* i<sup>2</sup>, 394 II, dated 506 B.C., while the inscription on the renewed monument (*IG* i<sup>2</sup>, 394 I) was engraved stoichedon. The Marathon epigram, which is slightly earlier than the latest of the three inscriptions mentioned above, is engraved in complete stoichedon order. Its connexion with the artist Euthykles again shows what an important part in the development of the stoichedon style was played by the artists.

### NOTE III

Among the early examples from Attica, listed by Austin, p. 7, there is only one, *IG* i<sup>2</sup>, 1014a, which is certainly earlier than *IG* i<sup>2</sup>, 485. Austin recognises (pp. 10 ff.), this inscription (*ZAW*, cols. 52 and 61) as 'a primitive example of the stoichedon style.' But, as we have three more inscriptions engraved by the same hand, or at least signed by the same artist (A. Wilhelm, *Beiträge*, pp. 14, fig. 5 and 21, fig. 8; *ZAW*, cols. 58 ff., fig. 17), the stoichedon order of this inscription can rather be characterised as an isolated, though important, example which has no immediate connexion with the later development of the style. We have deliberately used here almost the same words as Austin (pp. 13 ff.) uses in his discussion of the dedication of Aiakes, and it should be noted that the artist who made the statue of Phrasikleia was a Parian. Thus, the assumption of the independent usage of the stoichedon style in the East, made by Austin (p. 16), is acceptable.

## NOTE IV

Besides the stoichedon inscriptions mentioned in Note II and in footnote 3, I should like to add the following, which belong, I think, to the period before 480 B.C.

1. *IG* i<sup>2</sup>, 521 + 722 (*ΖΑΠ*, cols. 39 f., fig. 8). The drawing as well as the restoration are incorrect; *cf.* Lauffer, p. 90.

2. *IG* i<sup>2</sup>, 557. The hexameter is engraved stoichedon and can be restored to:

[᾽Αρχῖν ?]ος : μ᾽ ἀν[έθεκ]ε[ν]  
[ἀπαρχέ ?]ν : ᾽Αρχ[ίο : ἡ]υό[ς].

The deviation from the stoichedon alignment in the last letters of the second line is due to the punctuation between ᾽Αρχ[ίο and ἡ]υό[ς]. For the restoration of the name *cf.* Robinson and Fluck, *Greek Love-Names*, p. 86.

3. *IG* i<sup>2</sup>, 623. As far as preserved, the inscription is engraved stoichedon. There is, however, one place where the restoration does not meet the requirements of the stoichedon order. We have to accept Lauffer's restoration (p. 88), but, furthermore, we have to suppose that the letters ΙΔΙΔ (of παίδι Διός) occupied the space of only two letters. Lauffer (p. 97, no. 12) connected this inscription with several other dedications; I think, however, that the only other extant inscription which may have been engraved by the same hand is *IG* i<sup>2</sup>, 566.

4. To *IG* i<sup>2</sup>, 505, a dedication signed by Pollias, can be added *IG* i<sup>2</sup>, 517, which is, as well as *IG* i<sup>2</sup>, 511 (*ΖΑΠ*, col. 35), part of a fourth monument signed by Pollias. The letter-forms are closely related with those of *IG* i<sup>2</sup>, 505, and the dedicatory inscription also shows stoichedon order. Lauffer (pp. 106 ff.) expanded my cautious remarks about Pollias and attributed several inscriptions to the same artist. *IG* i<sup>2</sup>, 649 as well as Loll. 341 may really belong to Pollias. It is tempting to suggest that they even belong to the same monument. I see, however, no reason for including *IG* i<sup>2</sup>, 653 in this group. E. Löwy, *Sb. Akad. Wien*, 217, Abh. 2, 1938, pp. 95 ff., made an attempt to use the Pollias signatures as further evidence for his new date of the beginning of the red-figured style. In this connexion there is but one point worth arguing. *IG* i<sup>2</sup>, 505, line 4, has to be read [h]ο χειμέρπο. Löwy may well be right if he connects the first part of this name with κίμμερποι. The change from kappa to chi would be due to the foregoing spirans of the article; *cf.* P. Kretschmer, *Griechische Vaseninschriften*, p. 155, no. 136. A similar case may be *IG* i<sup>2</sup>, 746, where can be read ho : χρίου : χρίας written after ho instead of κρίας.

5. There is still another group containing four stoichedon inscriptions, one of them (*IG* i<sup>2</sup>, 643) listed by Austin (*cf.* Lauffer, p. 93). A second inscription inscribed on a similar capital is closely related (*ΖΑΠ*, cols. 25 f., no. V), except for the theta, the cross of which is rendered in *IG* i<sup>2</sup>, 643 in the shape of a St. Andrew's cross. The same

shape of theta occurs on a third stoichedon inscription, *IG* i<sup>2</sup>, 675 (*ΖΑΥ*, col. 56; here connected with Loll. 291, which contains the rest of Diopeithes' signature; cf. Lauffer, p. 105, fig. 9), which may also belong to the years before 480 B.C.; cf. H. Pomtow, *Phil. Woch.*, xxxii, 1912, cols. 603 ff. Finally there is *IG* i<sup>2</sup>, 523, the signature of Diopeithes, which can also be dated prior to 480, since another inscription (non-stoichedon), engraved by the same hand (*IG* i<sup>2</sup>, 633 + 739<sup>290</sup>; *ΖΑΥ*, col. 26, no. V; Lauffer, pp. 103 ff., fig. 8), shows the theta with an upright cross. We may suggest that all these inscriptions form one group which can be attributed to the artist Diopeithes or to his workshop; cf. Ch. Picard, *REG* lli, 1939, p. 123.

It may be noted that we have, besides *IG* i<sup>2</sup>, 658 (Austin, pl. 3a), three more columns bearing stoichedon inscriptions: *IG* i<sup>2</sup>, 489, 510 and 509; the last perhaps engraved after 480 B.C.

#### NOTE V

Austin explains (p. 12) the distinction between the dedicatory inscription and the artist's signature in *IG* i<sup>2</sup>, 505 and 506 as due to an incomplete stoichedon order, because the two examples he refers to have the letters of the signature closer together than the stoichoi of the dedicatory inscription above them. Yet this distinction occurs also in non-stoichedon inscriptions, and was generally applied in Attica from the end of the sixth century B.C.

Dedicatory inscription and artist's signature are on different faces of the base: *IG* i<sup>2</sup>, 491 + 642, 503, 511 + 517, 513 + 704, 514 + *EM* 5161, 521 + 722, 523, 539, 628 + 690 + Loll. 93, 675 + Loll. 291, 972, 986, 1014, 1024, *ΖΑΥ*, cols. 28 ff., no. vii, fig. 5.

Dedicatory inscription and artist's signature are on the same face, but clearly separated either by space between them or by different alignment of the letters: *IG* i<sup>2</sup>, 395 (Lauffer, p. 93), 485 (stoich.), 488, 490, 500, 504, 505 (stoich.), 506 + Loll. 301 (stoich., Lauffer, p. 109), 515 + 709, 516 (stoich.). The artist's signature is omitted in the *IG* i<sup>2</sup>, cf. *IG* i, s. p. 154, nos. 354 + 362,<sup>10</sup> 518, 520, 524, 525 (stoich.), 526, 527 (stoich.), 532, 533 + 542 + 715, 534 (stoich.), 535, 538 (stoich.), 672, 737<sup>315</sup> + Loll. 347, 983, Loll. 275 + E. M. 5532 (stoich.). For the inscriptions connected with other fragments see *ΖΑΥ*.

Bearing these numerous examples in mind, we may doubt whether *IG* i<sup>2</sup>, 547 represents as a whole the dedication of the cithara-player Alkibios, whose home was the island Nesos (H. T. Wade-Gery, *AJP* lix, 1938, p. 472, note 1), or whether the fourth line, which obviously differs from the stoichedon order of the three lines above, may not rather contain the name of the artist: Nesiotes (*ΖΑΥ*, col. 44).

<sup>10</sup> The monument is a pillar as *IG* i<sup>2</sup>, 504 and 515 + 709 (*ΖΑΥ*, cols. 35 f., fig. 7). To a similar monument belongs the fragment *IG* i<sup>2</sup>, 678, which also has an epigram engraved on the right lateral face; cf. Lauffer, pp. 99 f., fig. 6. E. Lowy (*Sb.*

*Akad. Wien*, 217, Abh. 2, 1938, p. 94) proposes for *IG* i<sup>2</sup>, 516 a date as late as the sixties. We have, indeed, no reason to suppose that the fragments of this monument were found in the Persian debris; cf. W. Klein, *Lieblingsinschriften*,<sup>2</sup> pp. 26 f.

There are, however, some inscriptions which make no distinction between artist's signature and dedicatory inscription. Early examples are *IG* i<sup>2</sup>, 1012 and *SEG* iii, no. 55, both grave monuments signed by Phaidimos. Late examples from the period after 480 B.C. are *IG* i<sup>2</sup>, 400, 528-31 (only one of them, 529, non-stoichedon), and 826. Compared with the huge mass of bases which make a distinction between the dedicatory inscription and the artist's signature, there are from the years 520-480 B.C. very few examples where that distinction is neglected. It may be doubted whether *IG* i<sup>2</sup>, 536 actually contained the artist's signature in the third line. *IG* i<sup>2</sup>, 501 (*ZAW*, col. 65) had the signature of Kallon in the same line as the dedicatory inscription, but engraved on another slab, and perhaps separated by an uninscribed space; *cf.* Lauffer, pp. 98 f., no. 13, fig. 5. There remain, finally, only four examples which should rather be called exceptions: *IG* i<sup>2</sup>, 493, 497 + 645, 499, 978 (the latter from a grave monument). *IG* i<sup>2</sup>, 499, however, can be explained otherwise; *cf.* the similar monument discussed by H. Volkmann, *Klio*, xxxi, 1938, pp. 244 ff. The second part of the pentameter  $\tau\epsilon\acute{\iota}\ \delta\epsilon\ \theta\epsilon\omicron\iota\ \chi\alpha\rho\acute{\iota}\epsilon\nu$  does not belong to the dedicatory inscription, but can be connected with  $\epsilon\pi\omicron\iota\epsilon\sigma\epsilon\nu\ \tau\acute{o}\delta'\ \alpha\gamma\alpha\lambda\mu\alpha$  (the same phrase occurs in Antenor's signature, *IG* i<sup>2</sup>, 485). Thus, we have either to make a division in the middle of the pentameter, or to assume that the whole inscription contains the dedicatory inscription and signature of Lyson, son of Terpnos, from Thebes. Austin, illustrating the upper part of this inscription (pl. 1), notices the stoichedon order in the second and third lines and mentions in this connexion the retrograde inscriptions of the late sixth century B.C. Similarly on p. 12 he says that 'retrograde writing cannot be converted into a test of relative age.'

It may aid the understanding of these late retrograde inscriptions to refer to A. Wilhelm's observations (*Beiträge*, pp. 31 ff. and 306). He explained these inscriptions as engraved for the convenience of the reader; *cf.* LaRue Van Hook, *AJA* xxxvi, 1932, p. 292. To the examples listed by Wilhelm can be added almost all the Attic retrograde inscriptions of the late sixth century. On the Spartan hero relief of Chilon, recently published by A. J. B. Wace (*'Apχ.* 'Εφ., 1938, pp. 217 ff.), we find the hero and his consort enthroned to the left, looking in the same direction in which the inscription runs; *cf.* Ch. Picard, *RA* xiii, 1939, pp. 137 f. We may assume that Pausanias saw it on the right hand in his walk (iii, 16, 4). Furthermore, we find the same use of retrograde inscriptions in vase-paintings. We may refer to the calyx-crater of Exekias (O. Broneer, *Hesperia*, vi, 1937, p. 479, fig. 6), and to a red-figured cup in Baltimore (*Hesperia*, viii, 1939, p. 162, fig. 1).

#### NOTE VI

The dedication signed by Antenor is not the only one which shows the vertical striation. Most of the archaic inscriptions belonging to this class of monuments are engraved in stoichedon order: *IG* i<sup>2</sup>, 493, 643, 676, and *ZAW*, cols. 25 f., no. v—all stoichedon inscriptions. Apart from the non-stoichedon examples, *IG* i<sup>2</sup>, 679 (Lauffer, pp. 100 f., no. 15) and Loll. 7,

there is one inscription (*IG* i<sup>2</sup>, 566) vertically engraved on a pillar, and another one (Loll. 325) very similar to *IG* i<sup>2</sup>, 485, which has only one line preserved, so that it might have been stoichedon.

This striation, which owes its existence to the use of a big drove,<sup>11</sup> is not always at right angles to the lines of the inscriptions, but sometimes parallel to them. Striation running diagonally across the inscribed face, which is usual among the poros inscriptions, occurs also on several instances of the later period, *IG* i<sup>2</sup>, 521, adn. Loll. 92 and 93, 557, 637, 662, 667, 729, Loll. 349.

The bases with horizontal striation are inscribed stoichedon as well as non-stoichedon: *IG* i<sup>2</sup>, 474 (partly stoich.), 488 (non-stoich.), 497 + 654 (stoich.), 500 (one-line), 521 + 722 (stoich.), 572 (stoich.), 572, adn. E.M., 6313 (non-stoich.), 595 + Loll. 337 (non-stoich.), 674 (non-stoich.), 766 (stoich.), 990 (stoich.), Loll. 26 (one-line), Loll. 293 + E.M., 12946 (stoich. Lauffer, pp. 101 f.).

Since we suggested above that the vertical striation was a factor in the development of the engraving of vertical stoichoi, we may now assume that the horizontal striation was a factor in the engraving of the horizontal lines. Austin expressed his belief (p. 28, see also p. 120), 'that the engraver of the Salaminian decree . . . certainly used horizontal guide-lines.' These guide-lines, hypothetically supplied by Austin, are actually preserved on a considerable number of Attic inscriptions of just that period. Reference is made to the guide-lines, as far as I know, only twice in descriptions of an early Attic inscription. H. G. Lolling noticed in the first publication of *IG* i<sup>2</sup>, 394 II (A. Kirchhoff, *Sb. Akad. Berlin*, 1887, pp. 111 ff.) that the letters are engraved between thin lines, and he explained these lines (in the text to no. 94 of his Catalogue) as drawn for the convenience of the engraver; the other example is *IG* i, s. p. 199, no. 373<sup>237</sup> (cf. Lauffer, pp. 101 f.). I wonder whether the remark in the heading of *IG* i<sup>2</sup>, 394 II, 'lapis Eleusinius superne cymatio ornatus' does not refer to our guide-lines. Guide-lines occur very early and mostly in one-line inscriptions: *IG* i<sup>2</sup>, 466, 467, 478b, 989. These thin guide-lines, which were not intended to be seen, must not be confounded with the thick lines which often occur outside Attica, and which are part of the inscription itself. That we are right to distinguish between the thick lines and the thin guide-lines is indicated by *IG* i<sup>2</sup>, 989, which is engraved between thick lines, while the letters are lined up on thin guide-lines; *IG* i<sup>2</sup>, 971 and 981 show only thick lines (see Gisela M. A. Richter, *Antike Denkmäler*, iv, pp. 33 ff., pls. 19 and 20; A. Rehm, *Handbuch der Archäologie*, i, p. 216, note 2). The other examples of guide-lines, belonging to the late sixth or to the fifth centuries, may be listed without any comment, since all these technical details, so difficult to describe and to understand, are obvious when one sees the monuments. Guide-lines will be found on: *IG* i<sup>2</sup>, 596, 736, Loll. 351 (these are one-line inscriptions; for *IG* i<sup>2</sup>, 736, see J. M. Paton, *The Erechtheum*, p. 580, note 4): *IG* i<sup>2</sup>, 553, 643, 713, 726 (stoichedon inscriptions). The thin lines above and below

<sup>11</sup> This information was given me by Miss Gisela M. A. Richter, who is preparing a publication about the employment of the drove in archaic Attic sculpture.

*IG* i<sup>2</sup>, 689 belong, as Lolling has already noticed, to the painted ornament; a similar incised line will be found on *IG* i<sup>2</sup>, 713, *cf.* Lauffer, pp. 103 f. *IG* i<sup>2</sup>, 689 is engraved in an incomplete stoichedon order. The reading in *ZAW*, col. 56, no. xxvi has to be changed to ἀπ' αὐχέν. Non-stoichedon inscriptions with guide-lines are: *IG* i<sup>2</sup>, 394 ii, 555, 765, 975, Loll. 7; for *IG* i<sup>2</sup>, 765, see *ZAW*, cols. 57 f., fig. 16, for *IG* i<sup>2</sup>, 975 see *SEG* iii, no. 57. The guide-line as well as other evidence indicates the genuineness of this inscription.

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## THE EXPORT OF ATTIC BLACK-FIGURE WARE

It was suggested to me by Mr. T. J. Dunbabin that the question of Attic B.F. export might be treated by grouping chronologically—as far as possible, for the sake of convenience, in twenty-year periods—the Attic B.F. ware hitherto found at various sites. This method of grouping differs slightly, of course, from that of Payne,<sup>1</sup> and I have not found it possible to adhere strictly to it throughout (*e.g.*, for the middle of the sixth century), but it perhaps serves as well as any other for the purposes of what aims at being an economic rather than a purely archaeological survey.

Throughout the paper only the earliest finds from any one site are listed. Although this method may well seem to give an undue importance to certain sites which were apparently but scant importers of the ware, it would be impossible—within the scope of such a paper—to give exhaustive lists of the finds of every date.

One more point: I begin my grouping with the last twenty years of the seventh century, and have not included any pre-B.F. Attic export. This method has caused some difficulty, as sites which imported earlier types of Attic ware—*e.g.*, proto-Attic—necessarily appear in my lists at rather too late a date. I have, however, tried to indicate, as far as possible, where a site has been an importer of earlier types, and to give full references to the literature for the earlier periods.

A. For my earliest period—c. 620–600 B.C.—the distribution of Attic B.F. ware is, as far as I know, confined to the following sites:—<sup>2</sup>

*Attica* (where one would naturally expect it in largest quantity).

Athens—

Agora	Amphora and fragments	( <i>BSA XXXV</i> , 1934, pp. 218–19; <i>cf. Hesperia</i> II, 1933, pp. 570–97).
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(And quantities of earlier proto-Attic.)

Acropolis	Trans. proto-Attic to B.F.	( <i>Hesperia</i> IV, p. 243, no. 42); <i>cf. Graef, Akropolisvasen</i> , Pls. 14, 15, 19.
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Cerameicus	Fragments	( <i>BSA XXXV</i> , 1934, p. 219).
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(And early and middle proto-Attic in some quantity; *Id.* pp. 216–18.)

Vari	Large vases, bowls, etc.	( <i>JHS</i> LV, 1935, p. 154).
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Menidi	Fragment of large vase	( <i>NC</i> fig. 200).
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Phaleron	Fragment of large vase	(Benndorf, <i>Griech. u. Sicil. Vasenbilder</i> , Pl. 54, 2).
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(And proto-Attic c. 710–680 B.C.)<sup>3</sup>

Eleusis	Painted plaque	( <i>NC</i> p. 344).
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(And proto-Attic from c. 710 B.C.)<sup>4</sup>

<sup>1</sup> *NC* p. 344. *JHS* XLIV, 1929, p. 253.

<sup>2</sup> Fig. 1.

<sup>3</sup> *BSA XXXV*, 1934, pp. 214–15.

<sup>4</sup> *Op. cit.* pp. 214 ff.

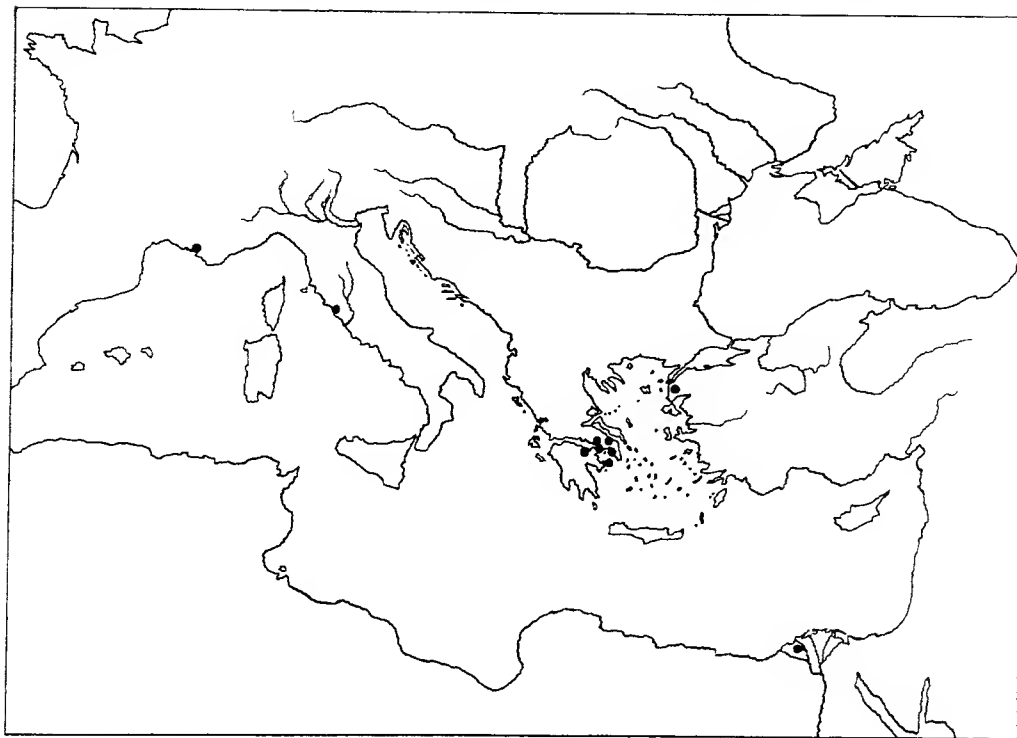


FIG. 1.—DISTRIBUTION, 620-600 B.C.

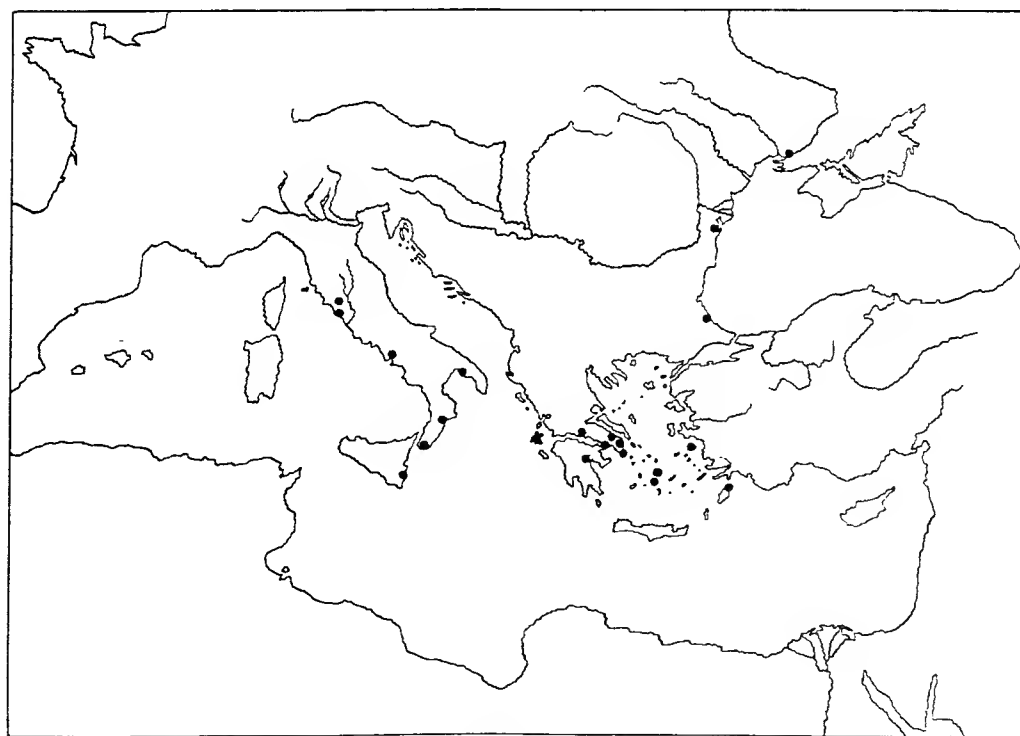


FIG. 2.—DISTRIBUTION, 600-580 B.C.



*Greece generally.*

Corinth	Large fragment of olpe	(Mus. inv. P32.235).
Aegina	Fragment of large vase (And proto-Attic from c. 710-620 B.C.) <sup>5</sup>	(Benndorf, <i>op. cit.</i> , Pl. 54, 1).
Perachora		(Unpublished—in apotheke).
	(And fragments of middle proto-Attic c. 630-30 B.C.) <sup>6</sup>	

*Outside Greece.*

Cervetri	Fragments	(AA 1923-4, pp. 46-9).
Marseilles	Fragment of amphora	(Vasseur, <i>L'Origine de Marseille</i> , Pl. X, 10-13).
	Fragment of rim of large vase	( <i>Ibid.</i> ).
Naucratis	Fragment of large vase	(CVA Oxford, II, Pl. I, 2; cf. NC p. 25).
Troy	Fragment of large vase	(Schuchhardt, <i>Schliemann's Sammlung</i> , 3828; cf. NC p. 344).

The distribution during this period is thus fairly restricted, and while on the one hand it includes what are generally recognised to have been important trading centres throughout the seventh century—*e.g.*, Corinth, Aegina and Cervetri—on the other hand it reaches two sites: Naucratis, founded c. 615-10 B.C.,<sup>7</sup> and Marseilles, founded c. 600 B.C., which only became fully active as trading centres during the sixth century.

Now, towards the end of the seventh century Athens was probably fully occupied with the capture of Salamis c. 610 B.C. and the expedition to Sigeum c. 607 B.C.,<sup>8</sup> and there is every reason to believe that she was far from stable financially or economically: it is therefore not improbable that Attic ware of this period was carried abroad on Corinthian ships, as this was one of the greatest periods of Corinthian mercantile activity. Corinth had dominated Greek commerce throughout the seventh century, and was herself one of the earliest importers of Attic ware. If, then, she had what amounted to a monopoly of the carrying trade, she might include in her cargoes such novelties in the way of Attic pottery as first reached her.

In the appearance of Attic ware of so early a date at Troy we have possibly the first archaeological confirmation of the above-mentioned expedition to Sigeum c. 607 B.C. This expedition may have considerable importance, as manifesting for the first time Athenian interest in the north-east: a subject best fully treated in conjunction with a discussion of the distribution of the fabric during the next period c. 600-580 B.C.

*B.* During these twenty years there is a striking development. Fabri of this date has been found at the following fresh sites:—<sup>9</sup>

*Attica.*

Laurium	Ram jug	(CVA Oxford, II, Pl. 13, 1).
Marathon	Amphora	(Pfuhl, <i>Mal. u. Zeich. d. Gr.</i> , III, fig. 90).
Sunium	Fragment of plaque	( <i>Ἀρχ. Ἐφημ.</i> , 1917, p. 209, fig. 19).
Vurva		

<sup>5</sup> *Op. cit.* pp. 214-19.<sup>6</sup> *Op. cit.* p. 218.<sup>7</sup> Cook *JHS* LVII, 1937, p. 230.<sup>8</sup> Freeman, *Work and Life of Solon*, p. 177. *CAH* IV, p. 32.<sup>9</sup> Fig. 2.

*Greece generally.*

Megara	Amphoriskos	( <i>VC</i> p. 193). (Perhaps into next period.)
Delphi	Fragments Vurva style	( <i>Fouilles</i> , V, p. 155, figs. 643-5).
Argos	Fragment polos style	( <i>AH</i> II, Pl. LXI, 22).
	(And fragments of proto-Attic c. 680-30 B.C.) <sup>10</sup>	
Orchomenos	Fragments of four vases	( <i>BCH</i> 19, p. 203, nos. 701-4).

*Greek Islands.*

Ithaka, Polis	' Sixth-century Attic '	( <i>BSA</i> XXXV, 1934, p. 53).
Delos	Vurva style lekythoi	( <i>Délos</i> , X, nos. 542-5).
	Vurva style amphora	( <i>Id.</i> X, no. 589).
	Vurva style lid	( <i>Id.</i> X, no. 647).
	Olpe with fish	( <i>Id.</i> X, nos. 591, 592).
	Fragment polos style	( <i>Id.</i> X, no. 650).
	Horse-head amphorae	(Mykonos museum).
Rheneia	Polos-style amphorae and hydriae	(Mykonos museum). <sup>11</sup>
Samos	Vurva style, fragments of crater and cup	( <i>AM</i> 1929, Beil. XXI).
	Fragment polos style	( <i>Id.</i> 1934, Beil. XXII, 1, 2).
Rhodes, Ialysos	Polos-style plate	( <i>Annuario</i> , VI-VII, 1923-4, p. 291, fig. 187).

*North-east.*

Istria	Two early sixth century fragments	(R. M. Cook). <sup>12</sup>
	Fragments of three comast cups	(R. M. Cook).
Berezan	" Vurvavasen "	( <i>AA</i> 1904, p. 105).
	(Number and quality unknown.)	
Apollonia Pontica	Two fragments polos style	(R. M. Cook). <sup>12</sup>

*West.*

Cumae	Crater	( <i>Mon. Ant.</i> XXII, Pl. LXVI).
Corneto	Horse-head amphorae <sup>13</sup>	
Veii	Amphora <sup>13</sup>	
Taranto	Horse-head amphora	( <i>JHS</i> XLIX, 1929, p. 255).
Locri	Polos style <sup>13</sup>	(Naples museum).
Reggio	Two swan-style kotylai	( <i>CIA Oxford</i> , II, p. 103).
Syracuse <sup>14</sup>	Two swan-style kotylai	( <i>Id.</i> II, p. 103).
	Cup with Siana-like stem	( <i>JHS</i> 1932, p. 191).
	Siana cup	( <i>Met. Mus. Stud.</i> V, no. 41).

These data prove that there is an intensified diffusion in Greece and a sudden spread of the fabric to the east and north-east and to key-points in Italy and Sicily, a development for which there must be some compelling cause.

The spread of the fabric so early to Rhodes, Samos and Delos is not remarkable if it was still carried in Corinthian ships: for the connexion

<sup>10</sup> *BSA* XXXV, 1934, p. 218.

<sup>11</sup> For this information I am indebted to Prof. Beazley.

<sup>12</sup> Notes left at the BSA.

<sup>13</sup> For this information I am indebted to Prof.

Beazley.

<sup>14</sup> For information about Attic B.F. ware in Sicily and South Italy I am very much indebted to Mr. T. J. Dunbabin.

between Corinth and East Greece was very close. But its spread to the recently founded colonies in the north-east has perhaps a wider significance.

The period coincides with that of Solon's reforms (if we accept his archonship as being 594 B.C.). Seltman (*Greek Coins*) and Freeman (*Life and Work of Solon*) have both recognised Solon's importance for the development of Attic commerce. Seltman, in dealing with the much-discussed passage in *Ath. Pol.* 10—'ἐπ' ἐκείνου γὰρ ἐγένετο καὶ τὰ μέτρα μείζω τῶν φειδωνείων, καὶ ἡ μὲν πρότερον ἔχουσα παραπλήσιον ἑβδομήκοντα δραχμὰς ἀνεπληρώθη ταῖς ἑκατόν. ἦν δ' ὁ ἀρχαῖος χαρακτήρ διδραχμον. ἐποίησε δὲ καὶ σταθμὰ πρὸς τὸ νόμισμα τρεῖς καὶ ἐξήκοντα μνᾶς τὸ τάλαντον ἀγούσας, καὶ ἐπιδιανεμήθησαν αἱ μναὶ τῷ στατήρι καὶ τοῖς ἄλλοις σταθμοῖς'—maintains<sup>15</sup> that the purpose of the reform 'was not to relieve debtors by lowering the value of the standard coin, but rather to free Athenian trade from a weight system such as bound the merchants to a local Peloponnesian standard which did not then extend beyond the Aegean Sea.' In fact the Athenian standard was now equated with the Corinthian rather than the Aeginetan, making trade with Corinth herself, and with other States using the same standard—e.g., Samos<sup>16</sup>—very much easier.

A specific reference to Solon's interest in trade is made in *Ath. Pol.* 11—'ἀποδημίαν ἐποίησατο κατ' ἐμπορίαν ἅμα καὶ θεωρίαν εἰς Αἴγυπτον.' There are no other direct references to this interest, but Freeman may well be right in suggesting first,<sup>17</sup> that Solon probably urged on the Athenians to the capture of Salamis in 610 B.C. (thus securing a free passage to and intercourse with Corinth, without Megarian interference), and secondly<sup>18</sup> that the passage in Diogenes Laertius I, 47—'ἔπεισε δὲ αὐτοὺς καὶ τὴν ἐν Θράκῃ Χερρόνησον προσκτήσασθαι'—may be interpreted as a reference, genuine though late, to Solon's recognition of the importance of the Hellespont as the entrance to the rich cornlands beyond. In this connexion Solon's ordinance (*Plut. Sol.* XXIV) forbidding the export from Athens of all natural products save oil ('τῶν δὲ γινομένων διαθέσιν πρὸς ξένους ἐλαίου μόνον ἔδωκεν, ἄλλα δ' ἐξάγειν ἐκώλυσε') is of significance as showing the great importance to Athens of her corn supplies.

These literary references are indeed scanty and unreliable, but taken in conjunction with the archaeological evidence suggest:—

- (1) that Solon's reforms had a definite commercial aim;
- (2) that that aim was the inauguration and development of a corn-trade with the Black Sea, where Greek settlers were now in a position to act as middlemen between the natives and Greek states.

Corinthian interest in this new Athenian enterprise is shown by the tradition of Periander's adjudication in the struggle between Athens and Lesbos for Sigeum; and independent Corinthian enterprise in the north by Periander's foundation of Potidaea. While it is possible, therefore, that Attic ware was carried to the north-east on Corinthian (or possibly East Greek) ships, its presence in the Black Sea colonies may be due to more direct intercourse.

<sup>15</sup> *Op. cit.* p. 45.

<sup>16</sup> *Op. cit.* p. 38.

<sup>17</sup> *Op. cit.* pp. 162–70.

<sup>18</sup> *Op. cit.* p. 177.

The introduction of the ware during this period to what I have called key-points in South Italy and Sicily—Tarentum, Locri, Rhegium, Cumae and Syracuse—rather indicates that it was distributed along a definite trade-route, established probably by Corinthian shipping.

C. During the next twenty years (*i.e.* 580–60 B.C.) the diffusion of Attic B.F. ware in Greece and at eastern and western sites is intensified: it is, as it were, consolidating its position. That this consolidation should occur now is significant, for it is precisely during this period that middle Corinthian ware gives place to late Corinthian, and that the Corinthian pottery trade, at least in the better types of ware, begins to decline.

Attic ware of this period is found at the following fresh sites:—<sup>19</sup>

*Greece.*

Potidaea	Comast cup	( <i>NC</i> p. 194, no. 12).
Cleonae	Olpe	(Louvre, M.N.B. 2035).

*Islands.*

Rhodes, Lindos <sup>20</sup>	Sophilos, fragment of large vase	(Blinkenberg, <i>Lindos</i> , p. 635, no. 2629).
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*East.*

Gordion	Klitias cup	(Koerte, pp. 140–1 and Pl. 7).
	Ergotimos (?) cup	( <i>Id.</i> p. 142 and Pl. 8).
	Fragments of cups	( <i>Id.</i> p. 187 and figs. 171, 178).
Pharsalos <sup>20</sup>	Sophilos fragment	
Theodosia <sup>20</sup>		
Sardis <sup>21</sup>	‘Attic vase, very early B.F.’	( <i>AJA</i> 1921, p. 114).

*West.*

Chiusi	Comast cup	( <i>NC</i> p. 194).
Vulci	Amphora (comast group)	(Gsell, <i>Fouilles</i> , p. 496).
Nola	Olpai	( <i>NC</i> p. 191 and fig. 86).
Falerii	Dinos	( <i>CIA Villa Giulia</i> , III, Pl. 2, 1 and 4).
Gela	Comast cup	( <i>Mon. Ant.</i> XIX, pp. 95 ff. fig. 4).
	Cup with lid	( <i>Jahrbuch.</i> 1896, p. 178, no. 5; <i>Id.</i> 1903, p. 132, no. 12, fig. 6 and Pl. 9).
	Pyxis lid, 580–70 B.C.	( <i>Mon. Ant.</i> XVII, fig. 309).
	Pyxis lid, 570 B.C.	( <i>Id.</i> figs. 189, 190).
	Siana cup	( <i>Met. Mus. Stud.</i> V, no. 17).
Megara Hyblaea	Comast cup	( <i>Mon. Ant.</i> XIX, p. 96, fig. 5).
Akrai	Comast cup	(Benndorf, <i>op. cit.</i> , Pl. 43, 1).
Motya	Fragment of comast cup	( <i>NC</i> Pl. 51, 4).
Selinus	Siana cup	( <i>Met. Mus. Stud.</i> V, pp. 93 ff. nos. 21, 70 and 73).

The ware is thus shown to penetrate inland from the coast of Asia Minor, and reaches for the first time in any quantity Italy and Sicily. That this great increase in diffusion in the west should coincide with the production of a new luxury fabric at Athens—*e.g.*, comast cups and Siana cups—cannot be accidental: a most probable explanation seems to be that while Corinth still supplied the western markets with her own vessels

<sup>19</sup> Fig. 3.

<sup>20</sup> I am indebted to Prof. Beazley for pointing this out to me.

<sup>21</sup> There is no evidence for the date of this vase beyond the statement quoted in the text.

containing oil, scent, etc., she carried also the finer Attic fabric as being likely to have the appeal of novelty.

One other point: the appearance of the ware at Motya in the extreme west of Sicily does not necessarily imply direct trade between east and west of the island. Greek ware found at Motya may have been taken there by Etruscans trading with Carthage: as Payne pointed out,<sup>22</sup> a direct trading route from Etruria to Carthage is more probable than one from Corinth to Carthage.

*D.* After 560 B.C. a difficulty arises in the assignment of the ware to chronological groups covering twenty years. The bulk of the ware produced between 560 and 520 B.C. is to be assigned to the period 550–20 B.C., and it is difficult, and perhaps artificial, to divide this period into two. I shall therefore treat the whole period 560–20 B.C. as one, indicating where an object falls well at the beginning or end of the period.

Ware of this period has been found at the following fresh sites:—<sup>23</sup>

*Greece.*

Olynthus	Fragments of large vase Column crater	(Robinson, <i>Olynthus</i> V, p. 69, Pl. 46). ( <i>Id.</i> V, p. 71 and Pl. 47).
Haliartus	Fragment of cup	( <i>BSA</i> XXXII, 1931, p. 191, fig. 6 n.).
Olympia <sup>24</sup>	'Ein fragment einer alten schwarzfigurigen Vase'	( <i>Olympia</i> IV, p. 203).
Rhitsona	Little master cup	( <i>BSA</i> XIV, 1913, p. 254, no. 264).

*Greek Islands.*

Thera	Column crater and cup (both latish)	(Dragendorff, <i>Thera</i> II, p. 222).
Lesbos	Fragment of crater and fragment of unspecified shape—both mid sixth century	( <i>BSA</i> XXXII, 1931, Pl. 24, 9; 24, 15).
	Fragment of bell-crater and fragment of unspecified shape —c. 530–20 B.C.	( <i>Id.</i> XXXII, 1931, Pl. 24, 13; 24, 12).
Chios	Two fragments of band-cups Fragment of B.F. closed vase Small black-glaze fragment	( <i>BSA</i> XXXV, 1934, p. 163). ( <i>Id.</i> ). ( <i>Id.</i> ).
Cyprus	Little master cups	(Myres, <i>Cesnola Collection</i> , 1729, 1735– 8; and in museum at Nicosia).

*East, north-east and south-east.*

Ephesus	Fragment of little master cup	( <i>Oest. Jahr.</i> 23, Beib. pp. 255–6 and fig. 47).
Miletus	Small fragment of little master cup	(Smyrna Museum).
Tarsus	Fragment of rim of little master cup	( <i>AJA</i> 1935, p. 541; now in museum on site).
Tell Tainat	Fragment of little master cup <sup>25</sup>	
Olbia	Eye-cup	( <i>AA</i> 1904, p. 105).
Daphnai	Fragments and vases	( <i>JHS</i> LVII, 1937, p. 229).

<sup>22</sup> *NC* p. 187.

<sup>23</sup> Fig. 4.

<sup>24</sup> There is no evidence for the date of this vase beyond the statement given in the text.

<sup>25</sup> I am indebted for information about this to Mr. Braidwood of the Oriental Institute, who tells me the fragment is now in Chicago.

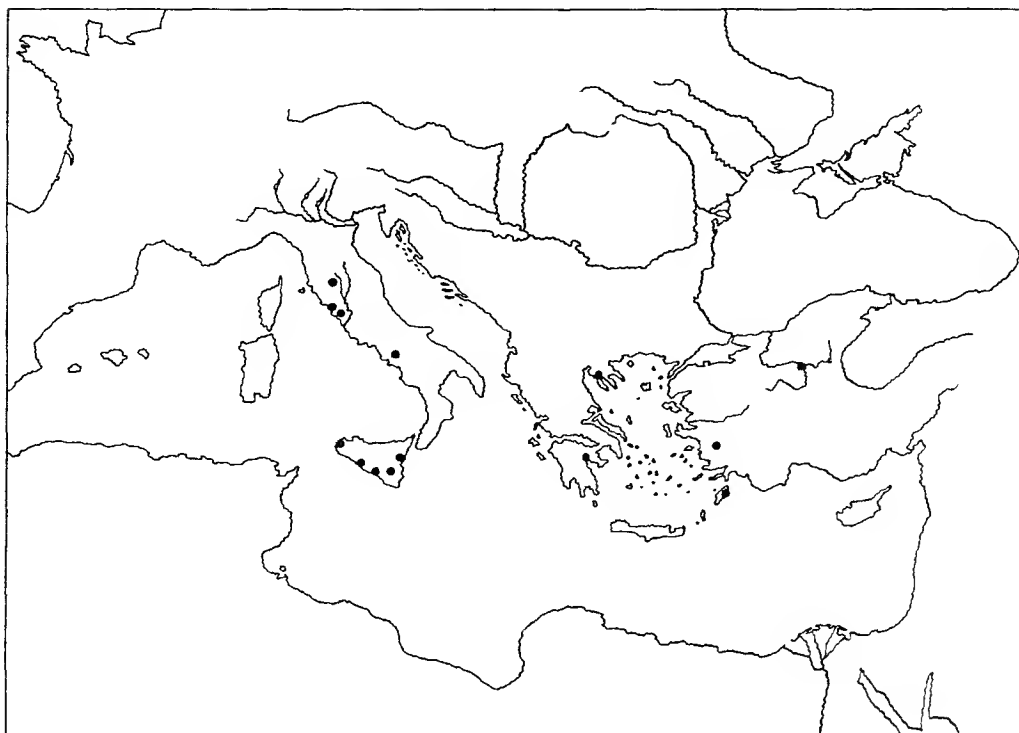


FIG. 3.—DISTRIBUTION, 580-560 B.C.

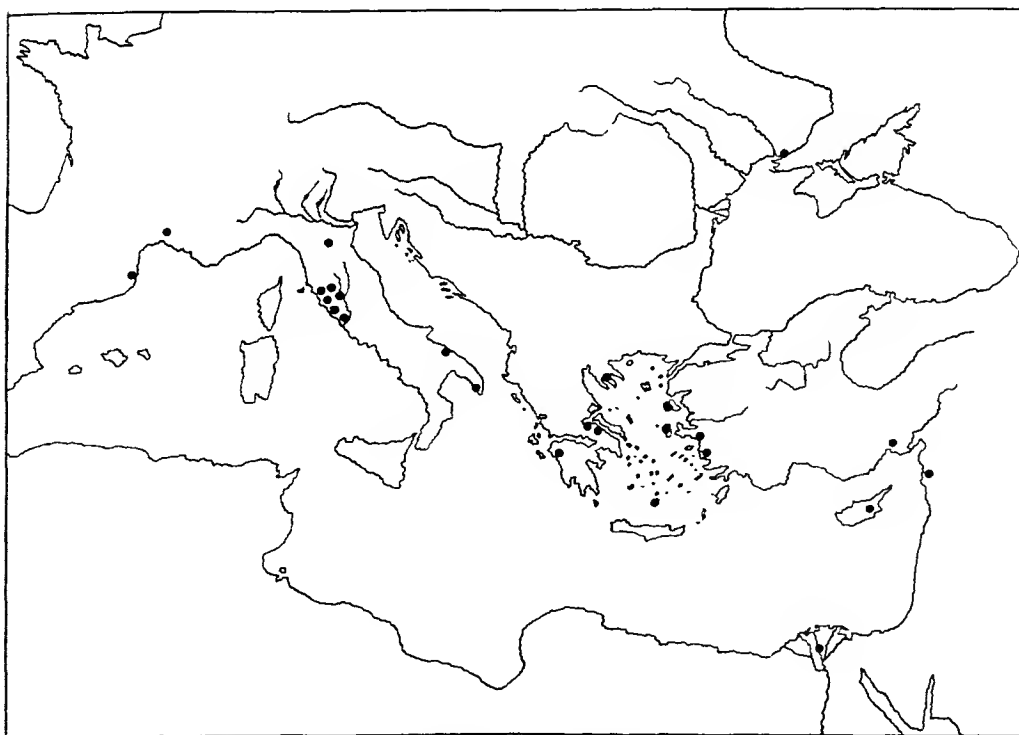


FIG. 4.—DISTRIBUTION, 560-520 B.C.

*West.*

Ampurias		(Frickenhaus, <i>Annuari Catalans</i> , 1908, p. 211).
Montlaure's	Fragment of Exekias neck-amphora <sup>26</sup>	
Narce	Amphora	( <i>CVA Villa Giulia</i> , I, Pl. 8, 3 and 4).
Vignanello	Fragment of lekythos and cups	( <i>Id.</i> III, Pls. 2, 32, 50).
Corchiano	Lekythos	( <i>Id.</i> III, Pl. 50, 12).
Nepete	Amphorae	( <i>Id.</i> III, Pl. 17, 1; 18, 4, 5; 19, 1 and 2).
	Cup	( <i>Id.</i> III, 46, 1, 2, 3).
Orvieto	Little master cups	( <i>JHS</i> LII, 1932, pp. 172, 176, 180, 182, 184, 190).
(And some earlier amphorae.) <sup>26</sup>		
Viterbo	Amphora	( <i>NS</i> 1902, p. 88, figs. 1, 2).
Bologna	Amphorae	( <i>CVA Bologna</i> , II, Pl. VI, 1-4; VII-IX).
Adria	By Affecter <sup>27</sup>	
Canossa	Cup	(Berlin, F. 1794).
Toscanello	Amphora	(Berlin, F. 1885).
Ruvo	Lekythoi	(Berlin, F. 1995, 1987).
Rome	Fragment of kylix	( <i>CVA Villa Giulia</i> , III, Pl. 25, 5).
	? Cassel cup	( <i>JHS</i> LII, 1932, p. 192).
Capua	Alabastron	(Berlin, F. 2029).
	Little master cup	(Berlin, inv. 4495).
Leporano	Little master cups	( <i>JHS</i> LII, 1932, p. 189).
Bari	Cassel cup	( <i>Id.</i> LII, 1932, p. 192).

It is now found for the first time in any quantity at Syracuse.

With all this material in mind I should like to direct attention to the following points:—

(1) The increased distribution, especially in the west, is sudden and most emphatic.

(2) The distribution follows on the whole normal lines of expansion to east and west. It now reaches sites hitherto monopolised by Corinthian ware.

(3) Syracuse—although so fully excavated and with copious finds of pottery, especially Corinthian—is on the whole a very scant importer of early Attic ware, and only comes fully into the market in the middle of the sixth century.

To deal with these conclusions individually:—

(1) The great increase in distribution must be due, in part at least, to the excellence of the fabric of this date. The very wide diffusion of little-master cups indicates an appreciation by Eastern and Western markets of the superb craftsmanship of Attic potters. But other factors must also have contributed.

First, the better type of Corinthian ware, the importance of which, as noted above, slowly decreases from c. 575 B.C. onwards, ceases to have any value for export purposes after 550 B.C.: thus a wide market which had

<sup>26</sup> I am again indebted for information about this to Prof. Beazley.

<sup>27</sup> For this information I thank Prof. Beazley.

hitherto relied for its better-class pottery on Corinth had to go elsewhere, and no state produced such better-class ware in greater quantity than Athens.

Secondly, the period coincides roughly with that of Peisistratus' tyranny. Peisistratus<sup>28</sup> was probably fully aware of the value of wide commercial connexions and the necessity for Athens of obtaining regular supplies of corn. It is difficult otherwise to explain his insistence on the seizure of Sigeum (a more successful attempt than that of Solon's day), and his introduction of the tetradrachm as the standard coin.<sup>29</sup> Further, his possessions near the River Strymon—with their commercial rather than agricultural value—assisted him in the development of public works in Athens and the consequent much increased contact with the outside world.

It is worth while emphasising here that the two periods of a suddenly increased diffusion of Attic ware to the north-east *c.* 600–580 B.C. and to the west *c.* 550 B.C., and of an increased output on the part of Attic potters, correspond with two most important phases in Athenian constitutional development, in each of which the 'law-giver' or 'tyrant' did his utmost to impose new standards of living.

(2) The distribution of the ware spreads naturally to the east and west, reaching in the east Cyprus and fresh sites in Asia Minor and Syria, and in the far west—for the first time—Spain. The ware is now found in quantity at sites hitherto monopolised by Corinthian.

(3) The appearance of Syracuse as so scant an importer of Attic ware—to judge from the surprisingly rare appearance, among the otherwise copious finds, of early Attic pottery—cannot be easily explained, and certainly not on the grounds of inadequate excavation. The sum total of imports of Attic ware into Syracuse for the period *c.* 600–550 B.C. is as follows:—<sup>30</sup>

Three swan-style kotylai	( <i>CIA Oxford</i> , II, p. 103).
Cup with Siana-like stem	( <i>JHS</i> LII, 1932, p. 191).
Siana cup C group	( <i>Met. Mus. Stud.</i> V, no. 41).

After 550 B.C. there is an increase in numbers, as on other sites in Sicily and Italy: but that a site so fully excavated, and which has produced such quantities of other fabrics, should produce only five examples of early Attic B.F. ware is indeed remarkable.

In this connexion it might be as well to examine the nature of the other finds from the site. Three types of imported geometric pottery have been found there: Cycladic,<sup>31</sup> Argive,<sup>32</sup> and Corinthian.<sup>33</sup> Following the geometric period, until about the middle of the sixth century, Proto-corinthian and Corinthian far outweigh all other imports: indeed, the only other fabric of the period found is Rhodian seventh-century ware.<sup>34</sup> No Laconian at all has been found. Attic ware begins in the first years of the sixth century. In the middle of the sixth century, when Corinthian

<sup>28</sup> Ure, *Origin of Tyranny*, p. 63.

<sup>29</sup> Seltman, *op. cit.* p. 49.

<sup>30</sup> For the whole of this section I am very much indebted to Mr. T. J. Dunbabin.

<sup>31</sup> *BSA* XXXIII, 1932, p. 181, fig. 7, nos. 1, 3, 4, 6.

<sup>32</sup> *Op. cit.* p. 182.

<sup>33</sup> *Loc. cit.* fig. 7, no. 5.

<sup>34</sup> *Mon. Ant.* XXV, p. 527, and *NS* 1925, pp. 182, 202.



ware was disappearing, Attic ware was imported in increasing quantity, and Camiran<sup>35</sup> and Fikellura<sup>36</sup> began to be imported. Thus there was a practical monopoly of Corinthian ware from c. 700 B.C. until after Periander's death (as Blakeway so strongly emphasised).<sup>37</sup> This preponderance of Corinthian and scarcity of Attic would not be so striking were Syracuse a less important state, or one known not to have imported in any great bulk: for during the seventh century the same preponderance of Corinthian ware also occurs at all other western sites. But for Attic ware to have reached Marseilles and Cervetri before Syracuse, and to have spread to a large number of Italian and Sicilian sites without notably increasing in quantity there, may possibly imply that there was some trade agreement or arrangement between Syracuse and Corinth which prevented the former taking immediate and full advantage of Attic products. There is also the point that if, as seems probable, Attic ware was first carried in Corinthian ships, it might naturally be expected to appear first at Syracuse.

After 520 B.C. there is no profit in tracing the export of Attic B.F. ware without that of R.F.—a subject in itself. The ware does indeed reach outlying districts in east and west, as one would expect from the increased ease of communication in the fifth century: and the appearance of the ware as far east as Deve Huyuk, 'on the caravan route from the Orontes valley to Carchemish via Aleppo,' is only one indication of the enormous circulation attained by it towards the end of its period of production.

One most important type of Attic ware produced during this period has been entirely omitted from the above classification—I mean the plain panathenaic amphorae, the export of which apparently began quite early in the seventh century.<sup>38</sup> The area covered by their diffusion is wide, and their importance for a correct estimation of Athenian export profound. It will have been observed that (of imported B.F. ware) a large number of sites included cups among their earliest imports, and that poor seconds in popularity were amphorae and lekythoi.<sup>39</sup> Although on the face of it this preference for cups might support the theory that the Athenian market relied chiefly on the excellence of its finer fabric for export, and that in the earlier period at least Corinthian ware was still the vehicle for the export of scent and oil, the quantity of plain amphorae found indicates that trade in oil and other commodities was at least as important to Athens (from perhaps c. 650 B.C.) as trade in pottery alone. The importance of this early trade in oil is further emphasised by literary and numismatic evidence—*i.e.*, by Solon's law forbidding the export of all goods *except* oil, and by the use of an oil amphora as a type on pre-Solonian coins.<sup>40</sup> Thus, though a survey of the Attic B.F. ware exported may illustrate the wide extent of Athenian commerce, it does not by itself indicate the wealth and variety of interests involved.

B. L. BAILEY.

<sup>35</sup> *Mon. Ant.* XXV, p. 530, fig. 119 and Pl. XII.

<sup>36</sup> *BSA* XXXIV, 1933, p. 47, Y7.

<sup>37</sup> *JRS* 1935, pp. 144-5 and note 62.

<sup>38</sup> *Hesperia* II, 1933, pp. 570-1.

<sup>39</sup> For types of Attic ware exported *cf.* Richter 'Distribution of Attic Pottery,' *BSA* XI.

<sup>40</sup> Seltman, *op. cit.* Pl. III, 8-11.

## THE SEISACHTHEIA AND THE NOMOTHESIA OF SOLON

THE orthodox date for Solon's archonship, 594/3, was undisputed until the discovery of the *Athenaion Politeia*<sup>1</sup>; then two passages in this treatise cast doubt upon this date and introduced further problems. The purpose of this paper<sup>2</sup> is to reconsider these two passages and to show that the *Ath. Pol.* in fact gives the date of Solon's archonship, during which the *Seisachtheia* was enacted, as 594/3, and gives the date of a second commission, during which the *Nomothesia* was passed, as 592/1; and I shall then consider how far the narratives of Plutarch and Aristotle imply that Solon held two separate commissions. My paper accordingly falls into two sections: the chronological data, and the *Seisachtheia* and the *Nomothesia*.

### I. THE CHRONOLOGICAL DATA

Apollodorus, *Chronica*, placed the ἀκμή of Solon in the 46th Olympiad (596/5–593/2) and the archonship of Solon in Ol. 46, 3 (594/3); this is proved conclusively by the statements by later chronographers and scholiasts, who derived their information from Apollodorus.<sup>3</sup> As Apollodorus was consulting the Attic archon-lists, his authority in fixing the date of Solon's archonship to 594/3 is impeccable; on the other hand, his dating of Solon's ἀκμή is an inference of which the truth does not concern us.

Aristotle, *Ath. Pol.* xiii 1, states the interval of years between the archonship of Solon and that of Damasias; as the latter can be dated (*cf. infra*) to 582/1, we should, by reckoning backwards, be able to date the archonship of Solon. Unfortunately the passage had been emended or interpreted in various ways.<sup>4</sup> There are, however, no *a priori* grounds for emendation, since the manuscript is both early and dependable.<sup>5</sup> In interpreting this passage one must bear in mind that in this treatise the

<sup>1</sup> Cf. F. Jacoby, *Apollodors Chronik*, in *Philologische Untersuchungen* vol. 16 (1902) p. 168. 'Bei dieser Übereinstimmung der Zeugnisse, zu denen noch indirekte treten, hat denn auch vor Auffindung der Ἀθηναίων Πολιτεία niemand an der Authenticität des Jahres 594/3 gezweifelt.'

<sup>2</sup> Read in shorter form to the Cambridge Philological Society, November 1938.

<sup>3</sup> Diogenes Laertius i 62, Clemens Alexandrinus *Stromata* i 65, and Tatian *ad Graecos* 41 date the ἀκμή in the words ἤμαθεν or εὕρισκεται γεγωνώς to the 46th Olympiad: in Eusebius *Hieronymi Chronicon* 99 the Latin MSS., supported by Cyrillus, give the 46th Olympiad for *Solon sua iura constituit*. As these four agree, the number μζ can be safely emended to μς in Suidas s.v. Σόλων γέγωνε κ.τ.λ. and

in Schol. Demosth. xlv 64 Σόλων γέγωνε κ.τ.λ.; and the Armenian MSS. of Eusebius, which give the 47th Olympiad, may be dismissed as inaccurately transmitting Apollodorus' date. The date of Solon's archonship is given by Diogenes Laertius i 62 ἤρξεν Ἀθηναίων and by the Latin MSS. of Eusebius *Solon sua iura constituit* as Olympiad 46, 3 = 594/3; as these two agree in the year, and as their datum for the Olympiad is confirmed, there is no reason to doubt the fact that in Apollodorus Solon was archon 594/3. Cf. Jacoby, *loc. cit.*

<sup>4</sup> Some of these are summarised in J. E. Sandys second edition (1912), pp. 50 f.

<sup>5</sup> This chapter of the *Ath. Pol.* is written in the first hand, which is especially good; cf. F. G. Kenyon's edition (1891), pp. xi f.

reckoning is inclusive of both termini,<sup>6</sup> that the connection of thought, though loosely phrased, is consecutive, and that the Greek (as compared with that of Plutarch in corresponding passages) is lacking in precision. The passage runs thus:—

Τὴν μὲν οὖν ἀποδημίαν ἐποίησατο διὰ ταύτας τὰς αἰτίας. Σόλωνος δ' ἀποδημήσαντος, ἔτι τῆς πόλεως τεταραγμένης ἐπὶ μὲν ἔτη τέτταρα διῆγον ἐν ἡσυχίᾳ· τῷ δὲ πέμπτῳ μετὰ τὴν Σόλωνος ἀρχὴν οὐ κατέστησαν ἄρχοντα διὰ τὴν στ[άσ]ιν, καὶ πάλιν ἔτι πέμπτῳ διὰ τὴν αὐτὴν αἰτίαν ἀναρχίαν ἐποίησαν. μετὰ δὲ ταῦτα διὰ τῶν αὐτῶν χρόνων Δαμασίας αἰρεθεὶς ἄρχων ἔτη δύο καὶ δύο μῆνας ἥρξεν, ἕως ἐξηλάθη βίᾳ τῆς ἀρχῆς. (Teubner ed. Opperman 1928.)

'This then<sup>7</sup> was the reason why Solon made his departure. And after his departure, the state being still in turmoil, for four years it is true they lived at peace,<sup>8</sup> but in the fifth after Solon's archonship they did not institute an archon owing to the faction, and again in the fifth year for the same reason they caused an anarchia. Thereafter at the same interval of time<sup>9</sup> Damasias being elected archon held office for two years and two months until he was forcibly ejected from office.'

If we take the passage from τῷ δὲ πέμπτῳ μετὰ τὴν Σόλωνος ἀρχὴν to the end, there is no difficulty in the Greek, and the reckoning from the archonship of Damasias gives the archonship of Solon as 594/3, the year recorded by Apollodorus; for, the three intervals of peace being each of three years' duration (for with inclusive reckoning 'the fifth year' includes the year from which and the year to which one reckons), we have the following table:—

594 3 Solon archon	589 8 <sup>1</sup>	585 4 <sup>1</sup>
593 2 <sup>1</sup>	588 7 <sup>1</sup> ἐν ἡσυχίᾳ	584 3 <sup>1</sup> ἐν ἡσυχίᾳ
592 1 ἐν ἡσυχίᾳ	587 6 <sup>1</sup>	583 2 <sup>1</sup>
591 0 <sup>1</sup>	586 5 ἀναρχία	582 1 Damasias archon, but
590 89 ἀναρχία		abuses his office

This is the only meaning which the Greek text can give; the reasons for omitting διὰ τῶν αὐτῶν χρόνων or reckoning exclusively<sup>10</sup> have been caused by the awkwardness of the preceding sentence and by the passage xiv 1, which in my opinion has been hitherto misapplied.

In the preceding sentence the four years of peace are apparently reckoned Σόλωνος ἀποδημήσαντος—i.e., from the date of Solon's departure; that is, by inclusive reckoning the four years include the year of Solon's departure, and, as we should express it, a peaceful interval of three years followed after the year of his departure. But in the following sentence (closely linked by the antithesis of μὲν and δέ) Aristotle changes his

<sup>6</sup> Cf. F. Jacoby *op. cit.* p. 170.

<sup>7</sup> μὲν οὖν is resumptive in this treatise, cf. chs. iv, ix and x.

<sup>8</sup> The Teubner text is here falsely punctuated, for the μὲν and δέ, together with the omission of ἔτι after πέμπτῳ, show that the sentences are closely linked and are both resumed in the phrase καὶ πάλιν

ἔτι πέμπτῳ.

<sup>9</sup> That this is the meaning of the phrase διὰ τῶν αὐτῶν χρόνων is clear from general Greek usage and from the example in Aristotle *Politics* iii p. 1275a 23, cited by Blass *Litterar. Centralblatt* 1893, p. 1713.

<sup>10</sup> As Bauer, Wilamowitz, Busoiti, Reinach, Poland and others have done.

reference-point of dating from the year of Solon's departure to the year of Solon's archonship; since the three year interval remains the same, this change is logical only if the year of Solon's departure and the year of Solon's archonship are one and the same—and that in point of fact is impossible.<sup>11</sup>

We must conclude, then, either that Aristotle, if he reckoned from the year of Solon's departure, made an error in adding the phrase μετὰ τὴν Σόλωνος ἀρχήν—but this is most improbable, because in this passage he is clearly commenting on an archon-list—or that, if he reckoned from the year of Solon's archonship, he did not intend the phrase Σόλωνος ἀποδημήσαντος to be the reference-point of dating. The latter alternative has much in its favour. In ch. xi, 1 Aristotle had given the reasons for which Solon ἀποδημίαν ἐποιήσατο and, after digressing into Solon's poems (ch. xii), he resumes that phrase at the opening of ch. xiii; continuing, then, with this thought in the connecting phrase Σόλωνος δ' ἀποδημήσαντος, his intention is to show that anarchy followed Solon's reforms at regular intervals. A paraphrase of the intended meaning might read: 'Solon departed and the state remained in a turmoil, for, though four years of peace followed, the fifth after Solon's archonship saw anarchy.' The explanation is thus available that what was intended to be a connecting clause with the previous sentence did in fact become a temporal clause defining the main verb διηγόν. Thus by a loose piece of writing (such as we find elsewhere in this treatise) Aristotle has written a sentence which in strict logic is incompatible with what follows; fortunately his general meaning is clear, once we see where the confusion lies.

The passage xiii, 1 may then be paraphrased in terms of English reckoning as follows: 'After Solon's departure the state was still in a turmoil; though during three years (593 2–591 0) they lived at peace, yet in the fourth (590 89) after Solon's archonship (594 3) they did not institute an archon owing to the faction; and again in the fourth year (586 5) for the same reason they caused an anarchia. Thereafter at the same interval of time Damasias being elected archon (582 1) held office for two years and two months, until forcibly ejected from office.' It thus affords welcome confirmation of the date given by authors using Apollodorus. It dates Solon's archonship to 594 3.<sup>12</sup> Aristotle, *Ath. Pol.* xiv 1 (Πεισίστρατος) κατέσχε τὴν ἀκρόπολιν ἔτει δευτέρῳ καὶ τριακοστῷ μετὰ τὴν τῶν νόμων θέσιν, ἐπὶ Κωμέου ἀρχοντος. The year of Comeas' archonship is known as 561 0 from the Marmor Parium (Jacoby *FHG* 239 A 40), and the thirty-second year before 561 60 reckoning inclusively is 592 1. The usual deduction from this passage is that Aristotle here dates the archonship of Solon to 592 1; as this conflicts with the statement in xiii 1, scholars have been compelled to emend and experiment with the translation of xiii 1 or else emend this passage. The more usual method<sup>13</sup> is

<sup>11</sup> The account of Solon's legislation and the interval of time which must have ensued before criticism arose from the actual working of the system (*Ath. Pol.* x and xi. 1), make it impossible to place these events within less than one year.

<sup>12</sup> Kenyon and Jacoby both take xiii, 1 as I have

done, but suspect or emend the later passage, xiv, 1; cf. Kenyon's edition pp. 33 and 38, and Jacoby *Apollodorus Chronik* pp. 170 and 171.

<sup>13</sup> Proposed by Bauer and followed e.g. by Sandys Wilamowitz, Jacoby.

to cut the knot by emending δευτέρῳ to τετάρτῳ; but, since the cardinal numbers in the *Ath. Pol.* MSS. are written in full and not in symbol,<sup>14</sup> there are no grounds for such an emendation. Alternatively, it has been assumed that this passage is correct and xiii 1 should be emended to coincide with it, which yields the conclusion that Solon's archonship, according to Aristotle, dated to 592/1. If so, as both Aristotle and Apollodorus were using Attic archon lists, one or other of them must have made a mistake as absurd as copying out the date of William the Conqueror incorrectly from a list of the Kings of England.

Yet Aristotle does not here say μετὰ τὴν Σόλωνος ἀρχὴν, but μετὰ τὴν τῶν νόμων θέσιν. The assumption that the phrase 'after the passage of the laws' is equivalent to 'after the archonship' lies at the root of the whole difficulty which besets the handling of the two passages in the *Ath. Pol.*; for, once that assumption has been made, it is necessary to jeopardise one passage for the sake of the other by methods which in the case of this text are unjustifiable. If we had no more evidence, one might argue *ad infinitum* about the theoretical correctness of the assumption; but, as I hope to show in the second part of this paper, there is evidence both in the *Ath. Pol.* and in Plutarch which indicates that the assumption is incorrect.

The date of the archonship of Damasias, which in discussing *Ath. Pol.* xiii 1 assumed to be 582/1, must be confirmed before I turn to the second part of this paper. The Marmor Parium (A. 38) gives the year 582/1, in which the στεφανίτης ἀγών was re-established at Delphi, ἀρχοντος Ἀθήνησι Δαμασίου τοῦ δευτέρου. The words τοῦ δευτέρου are added to distinguish him from an earlier archon of the same name—i.e., Damasias I archon in 639/8<sup>15</sup>; further, as these words would only be added at the first appearance of Damasias II, they show that 582/1 was the first of Damasias' two years of archonship. That the year is accurately transmitted in the Marmor Parium has been shown by Jacoby,<sup>16</sup> who adduces other passages associating the στεφανίτης ἀγών with the year of Damasias; moreover, this is supported by the preceding entry in the Marmor Parium, recording the re-establishment of ὁ ἀγών ὁ γυμνικός in the archonship of Simon as 591/0, which gives the multiple of three (a nine-year interval) required between the two Pythian festivals. The further archons recorded for this period fit in without difficulty: for the year before Solon we have Philombrotus<sup>17</sup> (595/4), for the year after, Dropides<sup>18</sup> (593/2), and for the year 592/1 Euclates,<sup>19</sup> if we define the year in the Olympiad 47 during which Anacharsis visited Solon as the one in which his constitutional reform was passed. We may thus implement the table given above:—

595/4	Philombrotus (a year of στάσις; cf. <i>Ath. Pol.</i> ii and v 2; and Plut. <i>Solon</i> xiii)
594/3	Solon ( <i>Ath. Pol.</i> xiii 1; Diog. L. i 62)

<sup>14</sup> Bauer and Sandys in suggesting that δευτέρῳ is a corruption of δὲ overlook this important fact.

<sup>15</sup> Dionysius Halic., *Antiqu.* iii 36.

<sup>16</sup> Jacoby *Apollodorus Chronik* p. 170 n. 12 and *FHG* 2 D pp. 687 f.

<sup>17</sup> Plut. *Solon* xiv 1. 23 (Teubner ed. Sintenis 1906).

<sup>18</sup> Philostratus *Vit. Soph.* i 16 Δρωπίδης ὅς μετὰ Σόλωνα Ἀθηναίους ἤρξεν.

<sup>19</sup> Diog. L. i 101 λέγει δ' αὐτὸν (Anacharsis) Σωσικράτης ἔλθειν εἰς Ἀθήνας κατὰ τὴν τεσσαρακοστὴν ἐβδόμην ὀλυμπιάδα ἐπὶ ἀρχοντος Εὐκράτους.

593/2	Dropides	} διηγῶν ἐν ἡσυχίᾳ ( <i>Ath. Pol.</i> xiii 1)
592/1	Eucrates	
591/0	Simon	
590/89	ἀναρχία	( <i>Ath. Pol.</i> xiii 1)

Finally, the only other archon we know for the period in question is Philippus in the year 588/7 (*Clemens Alex. Stromata* I 395 P), which falls within the second period of peace.

## 2. THE SEISACHTHEIA AND THE NOMOTHESIA

In studying the chronological problem I have suggested that Aristotle dates Solon's archonship to 594/3 and ἡ τῶν νόμων θέσις to 592/1. We must now enquire whether Aristotle himself makes that distinction elsewhere in the *Ath. Pol.*, and whether our knowledge of Solon's career derived from other sources supports this interpretation.

### A. Aristotle 'Ath. Pol.'

Aristotle sees two reasons for discontent before Solon's archonship—an economic δουλεία and a restricted πολιτεία (*Ath. Pol.* ii iv 5, v 1). Having recorded the election and powers of Solon (v 2; a passage to which I shall return), he gives the substance of what Solon did; in vi the economic reforms, especially the χρεῶν ἀποκοπῆ . . ., ἃς σεισάχθειαν καλοῦσιν, and in vii–viii the constitutional reforms (vii 1, πολιτείαν δὲ κατέστησε καὶ νόμους ἔθηκεν ἄλλους). In ix Aristotle passes judgement on the whole body of Solon's reforms. It would appear that Aristotle, in writing a constitutional handbook, has here arranged the Solonian reforms by subject-matter, keeping a distinction between economic and constitutional reforms and emphasising particularly the constitutional aspects. But in x he adds a chronological note: ἐν μὲν οὖν τοῖς νόμοις ταῦτα δοκεῖ θεῖναι δημοτικά, πρὸ δὲ τῆς νομοθεσίας ποιήσας τὴν τῶν χ[ρ]εῶν [ἀπο]κοπὴν, καὶ μετὰ ταῦτα τὴν τε τῶν μέτρων καὶ σταθμῶν καὶ τὴν τοῦ νομίσματος αὐξήσιν. ('In his legislation then these are in my opinion the democratic features; but before the legislation he enacted<sup>20</sup> the cancellation of debt and thereafter<sup>21</sup> the increase in measures weights and coinage.') He here marks a chronological gap between the cancellation of debts or *Seisachtheia* (vi 1), followed by reforms in measures, weights and coinage, and the constitutional reforms entitled ἡ νομοθεσία. Here we have the explanation of the two dates recorded by Aristotle in xiii 594/3 for the archonship (when the *Seisachtheia* and economic reforms were carried) and in xiv 592/1 for ἡ τῶν νόμων θέσις or *Nomothesia*, which resumes the phrase ἡ νομοθεσία in x and is there explained as constitutional reform by contrast with the economic reforms or *Seisachtheia*.

In xi Aristotle returns to his arrangement by subject-matter: xi 1,

<sup>20</sup> The Greek is here inarticulate; for, while μὲν οὖν is resumptive, the δὲ clause has no main verb. One can supply a verb such as δοκεῖ δημοτικός εἶναι for the participle ποιήσας, but the grammar does not justify it.

<sup>21</sup> καὶ μετὰ ταῦτα refers to the preceding phrase τὴν τῶν χρεῶν ἀποκοπὴν, not to ἡ νομοθεσία, as C. T. Seltman, *Athens, its History and Coinage* p. 16, takes it.

the constitutional reform (διατάξας τὴν πολιτείαν) causing discontent, Solon decided to depart; xi 2 'besides' (ἄμα δὲ καὶ),<sup>22</sup> the cancellation of debts caused discontent, which Solon resisted. The sequence of Aristotle's statements here proceeds from his own prior interest in constitutional matters; but the chronological note in x makes it clear that in this passage the chronological sequence is, first, economic reforms, followed by a discontent which Solon resisted, and, secondly, constitutional reforms followed by further discontent, in face of which Solon decided to go abroad. In xii Aristotle quotes two passages from a poem of Solon, which is concerned with the constitutional reform, and a poem ἐτέρωθί που (xii 3) of which the application by Aristotle is not clear; he then quotes a poem concerned with the *Seisachtheia* (xii 4 διὰ τὴν σεισάχθειαν) and another which he appears to date to after both *Nomothesia* and *Seisachtheia* (xii 5 πρὸς τὰς ὕστερον αὐτῶν μεμψιμοιρίας ἀμφοτέρων cf. xi fin. Σόλων ἀμφοτέρως ἠναντιώθη). In xii, too, Aristotle arranges by subject-matter; in order to obtain the chronological sequence we must reverse the order of the poems cited as applicable to these specific subjects.

We find, then, that Aristotle has arranged his narrative primarily by content, giving prior place to specifically constitutional points, but he has indicated the chronological sequence of two main bodies of reform in a manner which enables us to re-arrange in chronological sequence, if we so wish, the information which he gives. But in composing the chapters on Solon in this way he has produced some confusion, especially in x and xi, which disguises the bearing of the clear dates given in xiii and xiv, whereby the *Seisachtheia* enacted during his archonship is dated to 594/3 and the *Nomothesia* is dated to 592/1 when Solon was not archon, but held some extraordinary office. We may tentatively divine the distinction of two offices in γ 2 εἶλοντο κοινῇ διαλλακτὴν καὶ ἄρχοντα Σόλωνα, καὶ τὴν πολιτείαν ἐπέτρεψαν αὐτῷ, where Aristotle again lumps together by content; it seems likely that Solon was appointed ἄρχων καὶ διαλλακτὴς to solve economic problems, and was later appointed to an unnamed office carrying full powers over the constitution, which he was to reform.

### B. Plutarch, 'Solon'

Plutarch's *Solon* xii-xix, with which we are here concerned, and the *Ath. Pol.* in the chapters on Solon, have been conclusively shown to derive from a common source, Androtion's *Atthis*.<sup>23</sup> As *Atthides* were written in a chronological form, it is clear what Aristotle has done with the work of Androtion; he has re-arranged the matter in a form suitable to his purpose (*Ath. Pol.* ii and v-viii) laying emphasis on constitutional points and passing his verdicts on Solon the constitutionalist (ix), and he has then introduced a note of chronology based on Androtion's *Atthis*. The importance of Plutarch's *Solon* lies in the fact that he preserves the arrangement of Androtion and passes fewer verdicts of his own; we thus find in Plutarch the clearer form of the fourth-century tradition crystallised by Androtion.

<sup>22</sup> 'Besides,' not 'simultaneously'; for the καὶ reinforces ἄμα and the note in x shows that the

χρεῶν ἀποκοπαὶ preceded the νομοθεσία.

<sup>23</sup> Cf. F. E. Adcock *Klio* (1912) xii p. 1 f.

After the muddled Greek and confused order of the *Ath. Pol.* it is a relief to turn to Plutarch, who here, as in other respects, clarifies and corrects Aristotle.

After describing the economic crisis (xiii l. 26 f.), Plutarch records that Solon, as a neutral party between rich and poor, was elected ἄρχων . . . ὁμοῦ καὶ διαλλακτῆς καὶ νομοθέτης (xiv l. 24); his measures in this office include τὴν τῶν χρηῶν ἀποκοπὴν (xv l. 21), prohibition of usury on the person (xv l. 24), and a reform in the coinage, of which Plutarch distrusts Androtion's interpretation (xv l. 25 f.). These reforms pleased neither the rich nor the poor (xvi l. 1); Plutarch then quotes the two poems of Solon which Aristotle cited (*Ath. Pol.* xii 3 and 5) as illustrating the discontent which followed these economic reforms. 'Soon, however,' continues Plutarch (xvi l. 23 ταχὺ μέντοι) 'the people, perceiving the expediency of Solon's reforms and sinking their private grievances, united in a state-sacrifice which they named the *Seisachtheia*;<sup>24</sup> καὶ τὸν Σόλωνα τῆς πολιτείας διορθωτὴν καὶ νομοθέτην ἀπέδειξαν; οὐ τὰ μὲν τὰ δ' οὐχί, πάντα δ' ὁμαλῶς ἐπιτρέψαντες, ἄρχας, ἐκκλησίας, δικαστήρια, καὶ τίμημα τούτων ἐκάστου καὶ ἀριθμὸν καὶ καιρὸν ὀρίσαι λύοντα καὶ φυλάττοντα τῶν ὑπαρχόντων καὶ καθεστώτων ὃ τι δοκοίη—that is they appointed Solon 'modifier of the constitution' and legislator, giving him full and absolute power over all departments of the constitution. The measures which he passed in this capacity follow (xvii–xxiv); the account, which is much fuller than that in Aristotle, appears to be drawn both from Androtion and from other sources; after his laws had been passed (xxv l. 10), the critical and censorious attitude of his fellow-citizens (τὸ δυσάρεστον καὶ φιλαίτιον τῶν πολιτῶν) caused Solon's departure from Attica for a period of ten years. In the course of these chapters Plutarch (xviii) quotes the poem of Solon cited by Aristotle (xii 1) to illustrate the constitutional reforms.

The chronologically arranged narrative of Plutarch makes it quite clear that Solon held two separate commissions: elected for the first as archon, reconciler, and legislator to deal with economic problems, he passed reforms which were primarily economic in nature; appointed for the second as modifier of the constitution and legislator, he passed constitutional reforms by virtue of his full and absolute power over all departments of the constitution. Between these two commissions occurred the discontent of both parties after his economic reforms had come into effect; as the liberation of the *Hectemoroi*, the rearrangement of land boundaries in Attica, the repatriation of Attic citizens sold into slavery at home and abroad, and the reforms in currency weights and measures were comprised under the first commission, we should not be over-generous in allowing the space of a year or more for the reforms to be enacted and the discontent to grow. The interval between this discontent and the people's reconciliation and reappointment of Solon to another commission is expressed by Plutarch's ταχὺ μέντοι. How long was this interval?

<sup>24</sup> It seems probable that this is the origin of the term *Seisachtheia*, which seems to be a colloquial title like *Pentakosiomedimni*, and not that suggested by Plutarch xv l. 21, which smacks of the specious

diction of the fourth century; *Ath. Pol.* vi 1 ὡς σεισάχθειν καλοῦσιν ὡς ἀποσεισάμενοι τὸ βᾶρος supports the popular origin of the word.



Plutarch, like us, may have had in mind the reforms of the Gracchi as a parallel case, and we might on general grounds suppose that a year perhaps elapsed between the two commissions of Solon. Fortunately we are not dependent on general considerations; for we find the exact dates which we require in the *Ath. Pol.*

If my belief is correct that Plutarch preserves Androtion's *Atthis* more faithfully than Aristotle does, we find from these chapters of Plutarch that Androtion considered Solon to have held two commissions. If, then, Plutarch's account is substantially that given by Androtion, we can visualise the basis of Aristotle's account and we can see just how Aristotle re-arranged it; he ran the two commissions of Solon, kept distinct in Androtion-Plutarch, into one sentence<sup>25</sup> introducing Solon's measures (*Ath. Pol.* v 2), he dropped out the currency reform from the chapters dealing with the main reforms (vi-viii), and he took the quotations from Solon's poems out of their chronological setting and stuck them all together into his chapter xii. After assessing the democratic element in the main reforms (ix), Aristotle inserted a note of chronology and an explanation of the currency reform, which is a tacit criticism of Androtion's theory, together with the change of weights and measures. In xi he resumed the narrative with the departure of Solon, giving the reasons for popular discontent in the order of his interest and not in the chronological order which we find in Androtion-Plutarch. But Aristotle is not altogether loss; he does preserve the date of the second commission in which the *Nomothesia* was enacted, the clue to the meaning of the ταχύ μέντοι of Plutarch. We can thus conclude that the economic reforms, which the people called the *Seisachtheia*, were passed by Solon as archon in 594/3; that the application of the reforms, the ensuing discontent of both sides and their reconciliation, and the reappointment of Solon fell in 593/2; and that the constitutional reforms of Solon were passed in the year of his second commission, 592/1.

### C. Solon's Poems

In comparing the narratives of Plutarch and Aristotle we have touched upon Solon's poems. As the fragments of his poems are mainly religious, we cannot expect much evidence from them to support the chronology I have suggested for Solon the statesman. Frag. 3 and 4 ll. 1-8<sup>26</sup> (ed. Diehl) date in my chronology to before 594/3, for they evidently refer to the *stasis*, to heal which Solon was elected archon; frag. 23, 24, and 25, referring to the discontent after the *Seisachtheia*,<sup>27</sup> date from the chrono-

<sup>25</sup> Although I do not attach much importance to short verbal echoes, it is worth observing that *Ath. Pol.* v 2 (ἐβλοντο κοινῇ διαλλακτὴν καὶ ἀρχοντα Σόλωνα, καὶ τὴν πολιτείαν ἐπέτρεψαν αὐτῷ) has words in common with Plut. *Solon* xiv l. 23 (ἀρχων ὁμοῦ καὶ διαλλακτῆς καὶ νομοθέτης) and xvi l. 25 (τῆς πολιτείας διορθωτὴν καὶ νομοθέτην ἀπέδειξαν . . . πάντα . . . ἐπιτρέψαντες), which may mirror the words of Androtion's *Atthis*.

<sup>26</sup> I can see no reason in the content to assign ll. 9-12 to this fragment with Diehl; as ll. 9-12 are quoted in Plut. *Solon* iii 2 and ll. 1-8 are quoted in

*Ath. Pol.* v, there is no sign that they were associated together in Androtion's *Atthis*.

<sup>27</sup> Frag. 23 from the context in Plut. *Solon* xvi (*Ath. Pol.* xii 3 cites it as ἐτέρωθι που—i.e., as part of a different poem from that previously cited which deals with constitutional matters); frag. 24 from the context in Plut. *Solon* xv and from *Ath. Pol.* xii 4 which cites it as περὶ τῆς ἀποκοπῆς τῶν χρῶν καὶ . . . διὰ τὴν σεισάχθειαν; frag. 25 from the context in Plut. *Solon* xvi (*Ath. Pol.* xii 5 πρὸς τὰς ὑστερον αὐτῶν μεμψιμοιρίας ἀμφοτέρων may refer to discontent in either 593/2 or 591/0, but Plutarch settles the point).

logical context in Plut. *Solon* to 593/2; and frag. 5, referring to the discontent after the *Nomothesia*,<sup>28</sup> dates from the context in Plut. *Solon* and in the *Ath. Pol.* to 591/0 just before he departed from Attica. Since these fragments can be dated to these years from the contexts in Plutarch and Aristotle, we must see whether their content is compatible with the suggested distinction between Solon's *Seisachtheia* and *Nomothesia*. Frag. 3 and 4 ll. 1-8 have little bearing on this particular distinction. Frag. 23 l. 21: the words *πιείρας χθονὸς πατρίδος ἰσομοιρίαν*, expressing the popular desire for what was later known as *γῆς ἀναδασμός*, spring from the reforms in land-tenure which Solon introduced by his *Seisachtheia*; and the suggestion that Solon might well have made himself tyrant can aptly be referred to his tenure of the archonship, which Damasias II later tried to convert into a tyranny. Frag. 24 ll. 20 f. contains the same idea of the manner in which Solon could have exploited his position, and may therefore also refer to his archonship; in ll. 1-20 he defends what he has done by appealing to Black Earth to look upon his reform in land-tenure and his repatriation of citizens enslaved for debt, measures which, as we have seen, belong to the *Seisachtheia*; and I take it that ll. 18-20 in the context refer to equality before the law in matters of land-tenure and debt. Frag. 25 seems also to refer to the archonship and the *Seisachtheia*; in l. 6 he expresses the idea which occurs in frag. 24 l. 22, in l. 9 he puns on *ὄρος* perhaps with reference to frag. 24 l. 6, and in l. 2 'what the people now have' may refer to their liberty and land-tenure. Frag. 5 clearly refers to the constitutional solution contained in the *Nomothesia*; cf. the political<sup>29</sup> terms *γέρας* and *σὺν ἡγεμόνεσσιν*.

Thus the datable fragments of Solon's poems are in their content compatible with the distinction I have drawn between the *Seisachtheia* and the *Nomothesia*. We may even go further, and say they give some evidence in support of it; for frags. 23, 24, and 25 contain no reference whatever to any constitutional reform; equally frag. 5 is concerned only with constitutional matter. But on the orthodox theory, that all Solon's reforms, both economic and constitutional, were enacted in one year and Solon's poems of justification came after that year, it would be difficult to explain why one set of poems should be concerned exclusively with economic matters, and another, cited *ἐτέρωθί που*, exclusively with constitutional matters.

#### D. The Numbered Laws of Solon

The few laws of Solon which are numbered by the *Axones*<sup>30</sup> are also compatible with the division of Solon's work which I have suggested. In Plutarch *Solon* xix the eighth law of the 13th *Axon* is cited: that those deprived of franchise *πρὶν ἢ Σόλωνα ἄρξαι* should be enfranchised, except those who as a result of certain trials were in exile *ὅτε ὁ θεσμός ἐφάνη ὀδε*.

<sup>28</sup> Frag. 5 ll. 1-6 from the general context in Plut. *Solon* xviii and from the position of importance given to both 1-6 and ll. 7-10 in Aristotle's citation (*Ath. Pol.* xii 1-2); frag. 5 l. 11 from the context in Plut. *Solon* xxv.

<sup>29</sup> Cf. C. Gilliard *Quelques réformes de Solon* (1907)

p. 268.

<sup>30</sup> These laws are in my opinion genuine for the most part; this applies in particular to the laws with which I am here dealing, despite the doubts of Gilliard and others.

As the law is retrospective, the terminus πρὶν ἢ Σόλωνα ἀρξαι suggests that this law was passed during Solon's archonship (594/3), and the phrase ὅτε ὁ θεσμός ἐφάνη ὅδε refers to the time of publication—i.e., probably within the year 594/3. Is its content such that it forms part of the *Seisachtheia* and not the *Nomothesia* reforms? Commentators have been so interested in speculating what persons form the exception made in the law, that they have not asked who were to benefit by the restoration of franchise.<sup>31</sup> It seems to me that this law conferred the franchise on those who had been sold into slavery abroad or at home, a status which must have been preceded by loss of franchise (presumably under the pre-Solonian law of debt); the law therefore was to benefit those mentioned by Solon frag. 24 l. 8 f., and the exceptions were made to prevent undesirables from joining the flood of those returning from exile. On the other hand, we know of no context in the *Nomothesia* in which this law would fit.

If my interpretation is correct, the *Axones* of Solon fall into two groups assignable to different commissions; <sup>32</sup> to the group passed in 594/3 those as far at least as no. 13 belong to 594/3. Thus the other laws numbered by an *Axon* prior to no. 13 should also belong to this year; of these there are three, all from the first *Axon*. The law forbidding export of any natural product except olive-oil (Plut. *Solon* xxiv) is usually regarded as a standing law which promoted Attic commerce by encouraging the growth of olives; it seems to me, however, that its first effect would be deleterious to Attic export trade, for the increased output of olives would take a generation to become effective. I therefore suggest that this was a purely temporary measure passed in order to retain all food supplies, except olive-oil, in which there was already a surplus, for the feeding of liberated slaves and repatriated slaves and exiles.<sup>33</sup> It belongs, then, to the *Seisachtheia* period. The law regulating the care of widows and orphans, cited from the first *Axon*, may also belong to this period of social upheaval. The laws of Draco on homicide, cited by Demosthenes (xxiii 28) from the first *Axon* and copied (409/8) in the republication of the law from the πρῶτος ἄχσων which in both cases is probably the first *Axon* of Solon's laws,<sup>34</sup> are known from Plutarch (*Solon* xvii) and Aristotle (*Ath. Pol.* vii) to have been retained by Solon when he cancelled the other Draconian laws; since the cancelled laws must have included the laws of debt which had legalised the debt-slavery ended by Solon's *Seisachtheia*, this part of the first *Axon* may also be dated to 594/3.<sup>35</sup>

<sup>31</sup> For instance J. B. Bury, *History of Greece* p. 189, who thinks it allowed the Alcmaeonidae to return but not the descendants of Cylon, and F. E. Adcock in *CAH* iv 45, who holds it excluded both parties. I agree with the latter's interpretation.

<sup>32</sup> Within the groups the order may have been according to the government department concerned in each case; but this does not affect the relative position of laws passed in 594/3 and 592/1.

<sup>33</sup> Anyone who was resident in Athens during the period after the Greco-Turkish war will understand the effect of a sudden increase in the population of Attica.

<sup>34</sup> Tod, *GHI* no. 87, and others consider that the omission of the law on premeditated murder in this *Axon* shows that the *Axon* was Solonian.

<sup>35</sup> On this point an objection may be made against my view: Plutarch and Aristotle quote this law first under chapters dealing with the *Nomothesia*, and, as it occurs in the same position in both Plutarch and Aristotle, it stood in that context in Androtion. Either Androtion has erred (as is demonstrably the case in stating that οἱ φονικοὶ νόμοι were retained, since one of them was repealed, cf. Tod *loc. cit.* p. 216) or Solon did not finally cancel all the Draconian code until the *Nomothesia*.

From *Axones* numbered after 13 we have two laws. On the 16th, a law regulating the value of sacrifices (Plut. *Solon* xxiii) may belong both by the numbering of the *Axon* and by the nature of the law to either *Seisachtheia* or *Nomothesia*, but more probably to the latter. The laws governing adoption cited<sup>36</sup> from the 21st *Axon* clearly belong to the *Nomothesia*, for they effect an important change in the γένος system across which the Solonian constitution cut.

### E. Minor Passages

The visits of Epimenides and of Anacharsis to Solon are dated by Diogenes Laertius (I, 110 and 101 respectively) to the 46th Olympiad for the former and to the 47th Olympiad for the latter; as both these statements derive from Apollodorus,<sup>37</sup> they rest on good authority. The object of Epimenides was to purify the state;<sup>38</sup> this visit, then, would be the preliminary to the *Seisachtheia* reforms, in order to remove the pollution which was thought to bring on Athens continual στάσις. He is also said to have advised Solon in his legislation (Plut. *Solon* xii l. 31). Plutarch dates his visit by the context to just before Solon's archonship, and Eusebius<sup>37</sup> dates his visit to Olympiad 46, 2—i.e., 595/4—which we can accept as derived from Apollodorus. Aristotle (*Ath. Pol.* I) is alone in dating the visit of Epimenides to just after the trial of the Alcmaeonidae, and he may well be mistaken. The visit of Anacharsis fell in the 47th Olympiad (592/1 to 589/8) in the archonship of Eucrates; as a sage of the epoch, it is probable that he came to advise in the constitutional reform. As Solon had left Athens on any theory by 590/89 (the year of *anarchia*), and as Simon was archon in 591/0, the year in which Solon was visited by Anacharsis—i.e., the archonship of Eucrates—must be 592/1; if, as I suggest, the *Nomothesia* was enacted in this year, we can see the reason for Anacharsis' visit. Thus the chronology here suggested receives some support from the fact that one sage visited Athens in 595/4 and another in 592/1, and that both were associated by antiquity with reforms enacted by Solon.

### III. SUMMARY OF CONCLUSIONS

As the argument has necessarily concentrated on point by point, I append a brief summary of Solon's career as I see it in light of the chronology which I have advocated.

In 595/4 Solon, who had already made his name as a poet-statesman and soldier,<sup>39</sup> was elected as archon for the ensuing year 594/3 to act as διαλλακτήης in the στάσις, which turned primarily on economic issues; during the year before he took office he probably wrote the poems of

<sup>36</sup> Harpocration s.v. δτι οἱ ποιητοὶ παῖδες.

<sup>37</sup> Cf. F. Jacoby *Apollodors Chronik* p. 168 n. 8: 'Hier liegt sicher Apollodor zu Grunde.'

<sup>38</sup> Diogenes i 110; Eusebius *Hieronymi Chronicon* sub Ol. 46, 2; Suidas gives the Olympiad as μδ, emended to μς by Bernhardt *Ath. Pol.* I.

<sup>39</sup> The war against Megara, in the course of which

Athens lost and regained Salamis, should be dated, I believe, to the period between 600 and 595 B.C.; to this war Solon's poem 'Salamis' (frag. 2) relates. Solon also played a part in the declaration of the Sacred War—i.e., in 600/599 B.C.—since the ten-years war ended in 591/90.

which we have two fragments (3 and 4, 1-8), appealing for the spirit of *Eunomia*, and he invited Epimenides to come to Athens and prepare the ground for the economic reform he contemplated by purging the state of pollution. Of the laws which he passed during 594/3, we have datable fragments in the law of amnesty, the law reaffirming part of Draco's law on homicide, the law limiting export to olive-oil, and the law ensuring care of orphans and widows; for they are preserved in numbered *Axones*, which we have seen belong to a group dating to 594/3. While in office, Solon passed not only the general laws dealing with 'cancellation of debts,' the relief of *Hectemoroi*, the liberation and repatriation of slaves, and the revision of debt-laws, the exact nature of which measures lies outside the scope of this paper, but also the reforms in currency weights and measures, which occupied the latter part of his archonship.

In 593/2 (archon = Dropides) these radical reforms, which dislocated the organisation of society and the economic order of the state, brought serious discontent; the reply of Solon to his critics is preserved in the frags. 23, 24, and 25, which were written in this year. The people soon saw the wisdom of Solon's reforms; they united and sacrificed in a festival which they called the *Seisachtheia*, a title by which the Solonian reforms of 594/3 were afterwards known. The radical changes in the social and economic life of the state demanded some change in the form of the constitution; for this task Solon was the man chosen by the people and entrusted with far-reaching powers to modify the constitution (τῆς πολιτείας διορθωτής). The previous statesman who had instituted constitutional reforms, Draco,<sup>40</sup> had not held office as eponymous archon of the year; it is possible that he may have been an ἄρχων θεσμοθέτης, but it is more likely that he held an extraordinary position of which we do not know the title. Similarly, Solon was not elected eponymous archon in 592/1, but was appointed to some extraordinary office, of which the title is equally unknown to us. If we desire an analogy, the position of Sulla *dictator rei publicae constituendae causa* may afford one.

In 592/1 (archon = Eucrates) Solon exercised his full powers to carry sweeping reforms in the constitution; from the numbered *Axones* we can date one with certainty (concerning laws of adoption) and one with probability (regulating sacrifices) to this year. During this year Anarcharsis, the sage, visited and advised him. Laying down his powers at the end of 592/1, Solon was harshly criticised; he defended himself in the poems written in 591/0 (archon = Simon) of which we have only one fragment (no. 5), and then left Athens for ten years. During 591/0 Alcmaeon, the head of the exiled Alcmaeonid clan, which Solon had excluded from his general amnesty, succeeded with his friends Cleisthenes of Sicyon and the Thessalians, in bringing the Sacred War to a triumphant conclusion. He was inscribed at Delphi as 'the general of Athens,' a position to which he could lay claim in defiance of his exile, and then prepared to reinstate

<sup>40</sup> The publication of the law at this epoch was a constitutional innovation of great importance; it is possible that the ancient tradition, that he passed

more specifically constitutional reforms, may contain some element of truth.

himself in Attica.<sup>41</sup> This was accomplished in 590/89, a year of ἀναρχία. The coinage issued by Solon in 593/2 after his laws passed in 594/3 was now succeeded by one bearing the arms of the Alcmaeonidae.<sup>42</sup> During the following years the state was still distracted by strife, the year 586/5 being one of ἀναρχία; in 582/1 the archon Damasias did not lay down his power, but stayed in office until forcibly ejected in 580/79. By this time Solon had returned from his ten years of travel; in protest at the attempted tyranny of Damasias and the failure of the people τὰ γεγραμμένα ποιεῖν (*Ath. Pol.* xi 1), he wrote c. 581/0 some poems to which frags. 8, 9, and 10 probably belong. Yet he lived to see another tyranny, that of Peisistratus, established in 561/0 (archon = Comeas).

The chronological data on which this reconstruction rests are derived from authors using Apollodorus, and from Plutarch and Aristotle using Androton. The data, when collected and interpreted, seem to give a convincing picture; and this has been done without emending or cutting any one of these data. The obscurity in which Solon's career at Athens has lain is due to a misapplication of the important chronological clue in *Ath. Pol.* xiv, to the emendation of *Ath. Pol.* xiii, and to the fact that it has not been sufficiently realised that Plutarch's *Life of Solon* is a more faithful account than the *Athenaion Politeia* of what fourth-century Athens believed Solon to have done.

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<sup>41</sup> Plut. *Solon* xi preserves the entry in the Delphic records; the view expressed above is not the orthodox one, but it seems to be compatible with the evidence and to explain the chaotic year at Athens

which follows. The Alcmaeonids were in close contact with Delphi.

<sup>42</sup> Cf. C. T. Seltman *op. cit.*, whose explanation and dating of the Heraldic coin-issues are convincing.

## TWO NOTES ON SELEUCID HISTORY

1. SELEUCUS' 500 ELEPHANTS
2. TARMITA

### SELEUCUS' 500 ELEPHANTS

I HAVE long suspected the 500 elephants of Ipsus, as the number is too remote from anything else known. Omitting these, the largest force of elephants which Greeks ever saw in action was the 200 of Porus; the largest force which any Greek ever commanded was the 120 or thereabouts which Eudamus brought to Eumenes<sup>1</sup>; the largest force which any king is recorded on good authority<sup>2</sup> to have possessed is the 150 of Antiochus III.<sup>3</sup> The number which Alexander (who never used them in battle) collected in India cannot be ascertained; but the uniformly modest numbers which, Eudamus' force apart, figure in the history of the Successors before Ipsus show that he cannot have brought away from India anything approaching 200. The vast figures attributed by various writers to Indian kings and peoples may be neglected, though doubtless Chandragupta, reckoning in the forces of his vassal kings, did control a large number. I have now by accident stumbled on something which certainly *will* explain the number 500 attributed to Seleucus; it remains to be seen whether the explanation be the correct one. I am not claiming to give an exact proof that it is, but there is a very high degree of probability. I had better indicate the proposed explanation first before coming to the Greek evidence about Seleucus.

In Indian literature before and during the Hellenistic period 500 is a stereotyped expression, the most usual expression, for 'a great many' or 'a large number'. As I have not seen this mentioned,<sup>4</sup> though it must be well known, I will give some evidence.<sup>5</sup> One's basis must obviously be the *Jātakas* (Buddhist birth stories)<sup>6</sup>; to these I add the *Dialogues of the Buddha*,<sup>7</sup> the *Milindapañha*,<sup>8</sup> and the *Asoka-Avadāna*.<sup>9</sup>

Five hundred is the stereotyped figure for disciples, priests, monks,

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<sup>1</sup> Exact number uncertain. Diod. XIX, 14, 8 gives 120; *id.* 28, 4 (Paraitakene) 114, but the detailed numbers add up to 125.

<sup>2</sup> Jerome's 400 and Appian's 300 (*Proöm.* 10) for Ptolemy II are worthless: the Appian passage is full of gross exaggerations. But his statement (*Lib.* 95) that Carthage had *stabling* for 300 might perhaps be true.

<sup>3</sup> Polyb. XI. 34, 12.

<sup>4</sup> J. Przyluski, however, in *La légende de l'Empereur Açoka* (*Açoka-Avadāna*), 1923, has in his index a considerable special entry under *cinq cents*.

<sup>5</sup> There must of course be a very great deal more.

But what I give should suffice.

<sup>6</sup> I am indebted to my daughter for going through Cowell's *Jātakas* (*The Jātaka*, trans. by various hands, ed. E. B. Cowell, 6 vols., 1895-1907) and taking out the figures.

<sup>7</sup> Trans. by T. W. Rhys Davids, 2 vols., in *Sacred Books of the Buddhists*.

<sup>8</sup> Trans. by T. W. Rhys Davids, 2 vols., in *Sacred Books of the East*, XXXV, XXXVI.

<sup>9</sup> Trans. by J. Przyluski, *op. cit.*, from the Chinese translation; extracts only from the Sanscrit original survive.

recluses, ascetics, students, sages, Brahmans<sup>10</sup>; it is the number of the Pratyeka Buddhas (solitary saints),<sup>11</sup> and is used of monasteries.<sup>12</sup> It is a common figure for traders and their wagons and merchandise,<sup>13</sup> and, associated with this, for pieces of money<sup>14</sup>; for births, families, and friends<sup>15</sup>; for men in any occupation or profession,<sup>16</sup> and especially for robbers<sup>17</sup>; for women<sup>18</sup>; for persons generally<sup>19</sup>; and for things of domestic life.<sup>20</sup> We get it for Kings and Queens, their Court and attendants<sup>21</sup> and items in their military forces<sup>22</sup>; it also extends to supernatural beings,<sup>23</sup> and Hariti, mother of the demons, whose stupa stood in Gandhāra, had 500 sons.<sup>24</sup> Particularly is it used for great or exaggerated measurements: 500 yojanas is the height of the Himalaya,<sup>25</sup> the length of the Ganges,<sup>26</sup> the length of monster fishes<sup>27</sup>; a large city is 500 yojanas in extent<sup>28</sup>; 500 rivers flow down from the Himalaya,<sup>29</sup> and at the traditional meeting of the waters the number of streams is of course 500.<sup>30</sup> Omitting some miscellaneous cases, I note its use for every sort of animal,<sup>31</sup> and among them elephants: in the *Samaññaphalla Sutta* the king Ajātasattu visits Buddha accompanied by 500 concubines riding on 500 elephants,<sup>32</sup> and in the *Alinacitta Jātaka* the king of Benares, Brahmadatta, possesses 500 elephants.<sup>33</sup>

But one can go further than this: 500 is also used to express, not merely a *large* number, but a large number which is also an *important* number. Instances are Asoka's Council of 500 ministers in the *Asoka-Āvadāna*, and Menander's Council of 500 Yonakas in the *Milindapañha*; and the first and third Buddhist Councils (I have not the number of the second) consisted of 500 members. Buddha himself when travelling is always accompanied by 500 Arhats<sup>34</sup>; and noteworthy is the account of his

<sup>10</sup> *Jātaka*, I, 1, 16, 27, 33, 35, 100, 109, 115, 159, 173, 207, 237, 241, 260, 273, 274, 305, 321; II, 28, 65, 119 (twice), 239; III, 12 (twice), 14, 35, 76, 83, 93, 94 (twice), 113, 154 (twice), 240, 319; IV, 9, 47, 61, 74, 91, 95, 168, 189, 205, 227, 268, 275; V, 66, 136, 219, 254; VI, 20 (often repeated). *Dialogues of the Buddha*, II, 237, 286, 287, 349. *Milindapañha*, II, 227 (160). Przyluski, *op. cit.* 309, 403.

<sup>11</sup> *Jātaka*, III, 281; IV, 227; V, 22. Przyluski, *op. cit.* p. 309.

<sup>12</sup> Przyluski, *op. cit.* p. 406.

<sup>13</sup> *Jātaka*, I, 6, 7, 10, 73, 135, 212, 220, 239; II, 90; III, 132, 243; IV, 221, 222; V, 12, 42, 86, 256; VI, 20. *Dialogues of the Buddha*, II, 139, 141. *Milindapañha*, I, 27 (17), 289 (202).

<sup>14</sup> *Jātaka*, I, 13, 253; II, 290, 294; IV, 9, 157; VI, 54, 123. Przyluski, *op. cit.* p. 387.

<sup>15</sup> *Jātaka*, I, 52, 64, 106, 109 (2 cases), 166 (3 cases), 314; III, 228; IV, 98, 101; VI, 40. *Milindapañha*, I, 289 (202). Przyluski, *op. cit.* p. 401.

<sup>16</sup> *Jātaka*, I, 19, 64, 255; II, 14, 65; III, 261; IV, 102. Przyluski, *op. cit.* pp. 392, 402.

<sup>17</sup> *Jātaka*, I, 121, 185; II, 264; III, 243; IV, 268. Przyluski, *op. cit.* p. 390.

<sup>18</sup> *Jātaka*, III, 40, 261; V, 5; VI, 140.

<sup>19</sup> *Id.* II, 65, 278, 287; IV, 32, 71, 183.

<sup>20</sup> *Id.* I, 273; V, 7. Przyluski, *op. cit.* pp. 415, 417.

<sup>21</sup> *Jātaka*, II, 65, 218; IV, 94; VI, 253. *Dialogues of the Buddha*, I, 65.

<sup>22</sup> *Jātaka*, II, 267 (warriors); IV, 94 (chariots); VI, 68 (archers).

<sup>23</sup> *Id.* II, 64 (nymphs), 94 (goblins).

<sup>24</sup> A. Foucher, *Notes sur la géographie ancienne du Gandhāra*, p. 17.

<sup>25</sup> *Jātaka*, V, 221.

<sup>26</sup> *Milindapañha*, I, 182 (121).

<sup>27</sup> *Id.* I, 130 (85); *Jātaka*, V, 250.

<sup>28</sup> *Jātaka*, VI, 86.

<sup>29</sup> *Milindapañha*, I, 171 (114); II, 129 (283).

<sup>30</sup> P. Demiéville, *Les versions chinoises du Milindapañha*, BEFEO. XXIV, 152 (LXXXVI).

<sup>31</sup> Horses, *Jātaka*, I, 19, 22; II, 22, 66. Asses, *id.* II, 67. Oxen, *id.* I, 73. Dogs, *id.* III, 319. Monkeys, *id.* III, 218; Przyluski, *op. cit.* p. 309. Stags and deer, *Jātaka*, I, 35, 39; Przyluski, *op. cit.* p. 293 (in the *Āvadāna* of Kunala).

<sup>32</sup> *Dialogues of the Buddha*, I, 65.

<sup>33</sup> *Jātaka*, II, 15.

<sup>34</sup> *Dialogues of the Buddha*, I, 108, 144, 173, 288, 300; II, 284. *Milindapañha*, I, 298 (207). Przyluski, *op. cit.* p. 266.



funeral in the *Book of the Great Decease*, where 500 suits of apparel are brought for the dead, the body is wrapped in 500 layers of cloth, and the pyre will not take fire till the arrival of the 500 brethren led by Mahā Kassapa.<sup>35</sup> I may conclude with Buddha's saying that his Law would last for 500 years.<sup>36</sup>

Seleucus' 500 elephants furnish an exact parallel to the Indian use: the number is not only a very *large* number, but is also an *important* number, for it was a term in that very important treaty between Seleucus and Chandragupta which maintained peace and friendship between these two great and contiguous empires for some 120 years. I now turn to Seleucus.

Strabo (XV, 724) gives the treaty between Seleucus and Chandragupta,<sup>37</sup> in which Seleucus ceded certain provinces and gave the Indian a daughter or niece, receiving in return 500 elephants. The treaty comes in the middle of a long passage from Eratosthenes; but whether Strabo took the treaty from him or inserted it himself, Eratosthenes was certainly not the original source. The original Greek source is almost bound to have been Megasthenes, who went to Chandragupta after the treaty as Seleucus' ambassador. The passage has never been included among the fragments of Megasthenes<sup>38</sup>; but the original source must have been an early one, as we shall see, and, as between India and the West, there does not appear to have been any writer in the West who could have given it. The early Seleucids had no historian of their own; no name, not even a name otherwise unknown, is found at their court till the reign of Antiochus III. One naturally thinks of Hieronymus, who wrote after Pyrrhus' death in 272; but he was primarily concerned with the house of Antigonos, and, as the silence of Diodorus shows, he gave nothing about Seleucus in the East between the general treaty of 311 B.C. and Seleucus' reappearance in the Aegean world in the winter of 302-1, before Ipsus. Neither, evidently, did any of the other sources whom Diodorus occasionally used in books XVIII to XX; the story of those years was lost to Greek history. As to India, there were indeed three Greeks besides Megasthenes who wrote on that country in the earlier part of the third century B.C. But Patrocles, so far as is known, wrote only on geography; nothing at all is known of Dionysius; Daimachus was not only later than Chandragupta, but is chiefly heard of as a teller of wild stories, and no influence either of himself or of Dionysius can be traced on the tradition. Megasthenes' book, on the other hand, remained for centuries the standard account of Chandragupta's empire, and Strabo made large use of it; Megasthenes is known to have given some account of the various invasions of India, real or

<sup>35</sup> *Dialogues of the Buddha*, II, 180, 182, 183, 185, 186.

<sup>36</sup> *Milindapañha*, I, 186 (131).

<sup>37</sup> On the treaty itself see Tarn, *The Greeks in Bactria and India*, 1938, p. 174, n. 3, and on what Seleucus actually ceded, *id.* p. 100. Appian, *Syr.* 55 ultimately goes back to the same source, but does not mention the elephants. Fresh light has since been thrown on the circumstances by E. T. Newell,

*The coinage of the Eastern Seleucid mints from Seleucus I to Antiochus III*, 1938, on which see my review in *JHS* 1939; but it is not material here.

<sup>38</sup> It is strange that O. Stein, in his enormously full article *Megasthenes* in *PW*, never considers the source of this treaty, though he ascribes to Megasthenes almost every mention of anything Indian in classical literature between the Alexander-historians and Claudius Ptolemy.

imaginary,<sup>39</sup> and there cannot really be much doubt that he was the original Greek source of the treaty between Seleucus and Chandragupta.<sup>40</sup>

Strabo, however, has a second allusion to these elephants; when describing Apamea on the Orontes (XVI, 752), he says that Seleucus kept there 'the 500 elephants,' τοὺς πεντακοσίους ἐλέφαντας. They were then, to Strabo, a tradition which was famous, which everyone would know; indeed they may have been so long before Strabo, for he might be quoting from Artemidorus, or from Poseidonius, whose home-town Apamea was. The original source of the number 500 must therefore be early; writers of the first century B.C. would be too late.

Of the other extant writers, Plutarch (*Alexander*, LXII, a most unsatisfactory chapter) repeats that Chandragupta gave Seleucus 500 elephants; but as Plutarch also, when speaking of Ipsus (*Demetrius*, XXVIII), says that Seleucus had 400 elephants in the battle, it seems clear that his 400 has been deduced from 500—we shall see why. Diodorus (XX, 113) gives Seleucus, before his junction with Lysimachus, 480 elephants. Diodorus XX is generally based on Hieronymus. Plutarch too used Hieronymus in his *Demetrius*, though mixed with inferior material, such as Duris; but one point in Plutarch's account of Ipsus—that Demetrius pursued Seleucus' horse too far, thus enabling Seleucus to use his elephants to cut him off from the main battle<sup>41</sup>—is so understanding that it must be from Hieronymus. Plutarch and Diodorus, then, both go back to Hieronymus for Seleucus' forces, as is further shown by their virtual agreement as to the number of his chariots (Plutarch 120, Diodorus 'over 100'). But their respective numbers for the elephants, 400 and 480, cannot possibly be derived from a common source; we have therefore to proceed on the basis that *neither* figure is from Hieronymus, and that the number he gave is unknown.<sup>42</sup>

Now there was a *second* occasion on which elephants were marched across Asia to Asia Minor, as those of Seleucus had been. In the press of the Galatian invasion of Asia Minor, probably in 277, Antiochus I, having no elephants, sent urgent orders to his satrap in Bactria to send him twenty, which probably entailed getting them from India. After reaching Babylonia, they were sent on in haste in advance of the troops<sup>43</sup>; when they reached Antiochus, only sixteen were battleworthy, but with them he defeated the Galati in the once-famous 'elephant victory,' 275 B.C.<sup>44</sup> Their march across Asia, then, cost him in casualties one-fifth of the force (not

<sup>39</sup> *FHG* II, frs. 20, 21, p. 416, and the end of fr. 23, p. 420.

<sup>40</sup> The argument that follows would apply equally to any other early Greek writer on India.

<sup>41</sup> Though Seleucus could never have manoeuvred 500, or 400, elephants on the spur of the moment, I am not using this passage as an argument, as it is possible that he laid a trap: his cavalry may have had orders to fly, which, as they were unbroken, would inevitably draw Demetrius on and enable the elephants, who were waiting for this, to intervene.

<sup>42</sup> I take it to be a sound rule that if two texts,

derived from a common source, give, on one matter, conflicting accounts, then what the common source gave on that matter is, in the absence of evidence *aliunde*, unknown.

<sup>43</sup> The fragment of a Babylonian Chronicle concerning Antiochus I, in Sidney Smith, *Babylonian Historical Texts*, 1924. I gave a full account in *JHS* XLVI, 1926, p. 157.

<sup>44</sup> Lucian, *Zeuxis* II: cf. Suidas, Σιμωνίδης Μάγνης Σιπύλλου, and the Myrina terracotta which I cited, *op. cit.* p. 157.

necessarily dead; more probably footsore, for elephants have tender feet). Some one, not Plutarch (possibly Duris, whom Plutarch is known to have used in his *Life of Demetrius*) applied this scale of casualties to Seleucus' 500, and produced the 400 elephants which appear in Plutarch as the number at Ipsus. Again we see that the original source for the 500 must have been early; the figure was credited at a time when Antiochus' loss, which fell out of the historical tradition, was fresh in men's minds.

But the same scale was not used in the case of Diodorus' figure, 480. There the loss is taken as twenty, one twenty-fifth of 500, too small a wastage for 500; the loss of twenty may then be a genuine figure. If we applied the one-fifth scale to this, it would give Seleucus 100 at the start and eighty in the battle, which is impossible; for all tradition, and the mocking title ἐλεφαντάρχης given him by Demetrius' friends,<sup>45</sup> show that he brought a larger force into action than any Successor had done before him, that is, larger than Eumenes' 120. We are dealing therefore here with a smaller percentage loss than one-fifth: he had not been so hurried as was Antiochus I, and his elephants had actually started from Babylonia, not from Bactria. His total therefore cannot be deduced from his loss; but there is still one figure which may help.

Antiochus III attempted to restore Seleucus' empire, and imitated him in every way, even to entering India and meeting the Maurya Sophagasenos,<sup>46</sup> as Seleucus had met the Maurya Chandragupta. He got from Sophagasenos enough elephants to raise his force to 150.<sup>47</sup> He had with him at the time an unknown number of elephants which he had got from Euthydemus<sup>48</sup>; he therefore obtained from the Indian, not a round number, as one would expect, but some broken figure, which shows that he attached great importance to that actual number, 150; had he wanted more, he could have bought them, just as Wu-ti for a time got his great chargers from Ferghana by ordinary purchase.<sup>49</sup> This suggests, though it only suggests, that Antiochus' insistence on 150 meant that, as usual, he was copying Seleucus, and that the real number which Seleucus got from Chandragupta was 150, a figure which would fulfil all requirements and which would have been to Greeks and Macedonians at the time an overwhelming force; it would have meant 130 in the battle as against Antiochus' 75. The suggestion may of course be wrong, and Seleucus may have had rather more.

<sup>45</sup> Plut. *Dem.* XXV.

<sup>46</sup> A Maurya, not a local ruler: Tarn, *Bactria and India*, p. 130 and notes.

<sup>47</sup> Polyb. XI, 34, 12: λαβὼν ἐλέφαντας ὥστε γένεσθαι τοὺς ἅπαντας εἰς ἑκατὸν καὶ πενήκοντα. It is not clear whether ἅπαντας means those he had in India at the moment, or all he possessed; but it makes little difference, for nothing shows that when he met Sophagasenos he had any in the West. The 102 he had at Raphia must have been lost there; the demotic version of the trilingual stele concerning Raphia, l. 14, says they were *all* captured ('Spiegelberg, *SB Bayer Ak.* 1925, Abh. 4; the Greek version has a lacuna). Spiegelberg, p. 19, indeed says that this cannot be taken literally in view of Polybius'

statement (V, 85, 5) that Antiochus had only 5 elephants killed; but this, even if true, only refers to his breaking of Ptolemy's left (which he continued to claim as a *personal* victory), as is shown by the added statement that he captured most of Ptolemy's elephants, whereas Ptolemy's right had been completely victorious. If one reads Polybius' account of the battle as a whole, one sees that Antiochus could not have saved many elephants (his own or captured), if any, in the universal flight at the end; the inscription, in saying he lost them all, is *substantially* correct.

<sup>48</sup> Polyb. XI, 34, 10.

<sup>49</sup> Tarn, *Bactria and India*, p. 309.

But he had not 500; his wastage of only twenty shows *that*. We have seen that Megasthenes was in all probability the original Greek source of that figure 500, and he used the same figure again in another and a purely fanciful story: when Heracles installed his daughter Pandaea as queen of the country of the Pāndhyas in southern India he gave her 500 elephants.<sup>50</sup> Now Megasthenes, though he acquired much valuable information about Chandragupta's empire, was easily taken in, witness the Indian yarns he retailed about men without mouths or without nostrils, men who slept inside their own vast ears, gold-digging ants, etc.; and what happened can be guessed. It is not likely that he saw a copy of the treaty or that he could have read it if he had; he got his information about it orally, as he did about everything which he did not himself see. His informant did not know exactly how many elephants Chandragupta had given to Seleucus, but he knew that it was a large number, an important force, which he naturally expressed as 500; the interpreter merely translated the number into Greek, Megasthenes did not know the Indian usage, and 500 for the Greek world it became ever afterwards.

One ancillary problem is insoluble: what became of the elephants of Ipsus? Seleucus still had some of them in his war with Demetrius in 285,<sup>51</sup> but in 277 Antiochus I had no elephants at all. They may have vanished in the revolt of the Seleucis,<sup>52</sup> but there does profess to be one later allusion to them: Juba, speaking of the age of elephants, says that one of Seleucus' elephants lived until 'the rule of the Antiochi.'<sup>53</sup> As more than one Antiochus ruled jointly with a son also named Antiochus, the statement has no meaning and may be neglected, especially as Juba, obviously from the same passage, goes on to say that he himself had captured an elephant in the Atlas which he knew by the (perfectly fresh) brand to be 400 years old.<sup>54</sup> Any forgery would take in Juba, and one hopes that the Mauretanian who branded an old elephant for his benefit and guided him to 'capture' it reaped the due reward of his ingenuity. But Juba throws no light on the elephants of Ipsus.

W. W. TARN.

### TARMITA

I have given elsewhere<sup>1</sup> what I then knew about the Demetrias founded by Demetrius of Bactria on the north bank of the Oxus at Tarmita,<sup>2</sup>

<sup>50</sup> Megasthenes (named) in Arr. *Ind.* VIII, 6; Pliny, *H.N.* VI, 76, gives the same story. But there is nothing to warrant the belief, which Schwanbeck started (though he himself treated the matter as uncertain) that all the *vires gentium* in Pliny VI, 66 *sqq.* are from Megasthenes; the Heracles story stands apart, since it is nothing real, and Pliny, as Muller noticed (*FHG* II, p. 410, note at the end of fr. 8), was using a number of sources, as he so often did.

<sup>51</sup> Polyaeus, IV, 9, 3.

<sup>52</sup> Tarn, *JHS* XLVI, p. 157.

<sup>53</sup> *FHG* III, p. 474, fr. 30 = Aelian, *N.An.* IX, 58,

μέχρι τῆς τῶν Ἀντιόχων ἐπικρατίας.

<sup>54</sup> *Id.* p. 476, fr. 34 = Philostratus, *Vita Apoll.* 13. The brand, τοῦπίσημον, on the tusk was κοῖλον καὶ οὐπω παρατετριμμένον ὑπὸ τοῦ χρόνου.

<sup>1</sup> Tarn, *The Greeks in Bactria and India*, 1938, pp. 118 *sq.*

<sup>2</sup> It comes from a Tibetan translation of a Sanscrit work: S. Lévi, *Journ. Asiatique*, 1933, p. 271, n. 1. The original mentions a town Dharmamitra (Demetrias), and the translator says that the name was the origin of Tarmita on the Paksu (Oxus). See further below.

mediaeval Termedh, now Termez. But there is a good deal more to say about this place, which throws light on a little-known phase of Seleucid history, the rule of Antiochus I in the East, 293–80 B.C.

Alexander is said to have founded an Alexandria in Sogdiana on the north bank of the Oxus,<sup>3</sup> about which nothing more is known; but there can be no reasonable doubt that it stood at Tarmita, for it could not have stood anywhere else. Alexander had a good eye for a trade centre, and Tarmita was a very important one; there the great main route from Samarcand and the north to Bactra, and so onward either to the West or to India, crossed the Oxus, intersecting the river route; later, the Silk Route, or, if we follow a recent theory,<sup>4</sup> one branch of it, there crossed the river; today the Samarcand railway there comes to the river. There was then a Greek city there before Demetrias. But Demetrius, with his known attitude towards Alexander,<sup>5</sup> would never have renamed an Alexandria, and never did: Bactra itself and Herat kept their Alexander-names, as did those other Alexandrias in his empire which are better known to us by their nicknames—Prophthasia, Bucephala, Iomousa.<sup>6</sup> When he founded this Demetrias, then, he found some other name at Tarmita, and there can be no doubt what it was: the place had become an Antioch, Antioch Tharmata of the Peutinger Table,<sup>7</sup> Antioch Tarmata of the Ravennate geographer<sup>8</sup>; these names are only Antioch–Tarmita. K. Miller indeed made Antioch Tharmata Merv<sup>9</sup> (though in his scheme Merv had already appeared in the Table<sup>10</sup>), we may suppose because he knew of no other Antioch in those parts. This misled me before,<sup>11</sup> though I should have seen that, once the name Tarmita was known, it could not possibly be correct. (Apart from the name, this theory caused Miller to make the route from Aris (Zarin) on the Hamun Lake to Merv two sides of a sharp triangle, whereas that route is known to have gone direct via Herat<sup>12</sup>; and the first side of his triangle, if prolonged, would have reached Termez.) Now Demetrius, who shore away from the Seleucids their provinces east of the Persian desert, would have had no scruples about changing the name Antioch, if circumstances made a re-foundation advisable. But neither Seleucus nor his son Antiochus I would lightly have

<sup>3</sup> Ptol. VI, 12, 6.

<sup>4</sup> E. Barger, *Geographical Journal*, XCIII, 1939, p. 387.

<sup>5</sup> Tarn, *op. cit.* chs. IV–VI, esp. pp. 131–2, 181.

<sup>6</sup> References for these cities, Tarn, *op. cit.*, Index under *Alexandria*.

<sup>7</sup> The Peutinger Table also gives a place Thimara in Orissa, near the mouths of the Ganges—see K. Miller, *Itineraria Romana*, 1916, maps 255, 256 and col. 789, which has sometimes been confused with Tharmata; consequently Tomaschek, *Antiochia*, 13 in PW. and V. Tschirikower, *Die Hellenistischen Stadtgrundungen*, p. 111, said that Antioch Tharmata was near the Ganges mouth (a strange place for an Antioch), though Droysen, *Hellenismus*,<sup>2</sup> III, 2, p. 323, had already shown that this idea was wrong. Thimara has nothing whatever to do with Antioch Tharmata.

<sup>8</sup> *Ravennatis Anonymi Cosmographia*, ed. M. Pinder and G. Parthey, p. 141.

<sup>9</sup> Miller, *op. cit.* col. 798.

<sup>10</sup> *Id.* col. 795. Miller himself noted this.

<sup>11</sup> Tarn, *op. cit.* p. 118, n. 8: ‘Antioch Tharmata . . . possibly a conflation of Antioch–Merv and Demetrias–Termedh which has been misplaced.’ This is wrong. I also think now that it was probably wrong to connect Tharmata with Stephanus’ ἄρματα πόλις Ἰνδικῆς; for some MSS of Diodorus, XVII, 103, 1, give Ἄρματα instead of Ἀρματήλια, a town in Sambos’ country on the lower Indus.

<sup>12</sup> Alexander had traversed the southern part, from Herat to Zarin; and the Suren, in the liquidation of the Saca invasion of 129 B.C., had driven the enemy back along the northern part, Herat–Traxiane–Merv: Tarn, *Seleucid–Parthian Studies* (Proc. Brit. Acad. 1930), pp. 16–18, *Bactria and India*, p. 499.

changed an Alexander-name, and when Antiochus I did change one, it was under compulsion: Alexandria-Merv was destroyed by nomads and he had to rebuild it, and so called it Antioch.<sup>13</sup> As after Seleucus' death in 280 the Seleucid kings were tied to the West and can have had no opportunity of founding a city in Bactria, Antioch-Tharmata was founded before 280, and the circumstances at Tarmita must have been the same as those at Merv: the Alexandria there must also have been destroyed by nomads, and Antiochus I rebuilt it as an Antioch (Tharmata). But if two Greek cities as far apart and as far south as Merv and Tarmita were destroyed by nomads, there must have been a regular invasion, not a mere raid.

This should enable us to identify another unknown city, the tenth Antioch in Stephanus which he calls Antioch in Scythia. I left it open before whether or no this city was Alexander's foundation Alexandria Eschate (Chodjend) on the south bank of the Jaxartes<sup>14</sup>; but now there cannot really be any doubt. Greeks commonly used the term Scyths for Sacas, and 'Scythia' here is Saca-land, 'Saca-land beyond Sogd' of the Hamadan gold tablet of Darius I,<sup>15</sup> which included the country south of and along the Jaxartes. The business of this Alexandria was to guard the great bend of the Jaxartes, the natural crossing-place for a nomad invasion from north of the river<sup>16</sup>; it was destroyed by the same invasion which destroyed the Alexandrias at Merv and Tarmita, and was like them rebuilt by Antiochus I as Antioch 'in Saca-land.'

Several things show this. Appian<sup>17</sup> says, or rather implies, that this Alexandria was founded by Seleucus. Its foundation by Alexander is certain<sup>18</sup>; but Appian points to some Seleucid connection, and in fact when Antiochus rebuilt it Seleucus was still on the throne, for on his death in 280 Antiochus quitted the Farther East for ever. Next comes the Peutinger Table,<sup>19</sup> which places the names Alexandria and Antioch side by side on the south side of the Jaxartes, which it calls Araxes.<sup>20</sup> Certainly it makes them two different places, but this is immaterial, for the Table combines information of different periods, and the habit of late geographical work to make two places out of one place with two names is well known; Ptolemy furnishes several instances,<sup>21</sup> and in the Peutinger Table itself Rhagae and Europus, which were quite certainly the same place,<sup>22</sup> became two towns a considerable distance apart. In the Table, below Alexandria, appears the word Arote,<sup>23</sup> doubtless the name of the province or district; below that, and spatially covering both names, Alexandria and Antioch,

<sup>13</sup> Pliny, *H.N.* VI, 47; Strabo, XI, 516.

<sup>14</sup> Tarn, *Bactria and India*, p. 118.

<sup>15</sup> *Id.* p. 291. J. Junge, *Saka-Studien*, Klio, Beiheft 41, 1939, p. 67, would extend this expression greatly north-eastward. It is not necessary to consider that here.

<sup>16</sup> Arr. IV, 1, 3.

<sup>17</sup> *Syr.* 57.

<sup>18</sup> Arr. IV, 4, 1.

<sup>19</sup> See the reproduction of this section in Miller, *op. cit.* at cols. 639-42.

<sup>20</sup> The name Araxes originally came from the

Oxus: it is Ar-axes, 'river Oxus,' just as Plutarch's Oresartes (*Alex.* XLV) is Ar-yaxartes; see R. Roesler, *Wien SB LXXIV*, 1873, p. 256, n. 3, who gives many parallels of river names beginning with Ar-. But 'Araxes' was often used of the Jaxartes after that river became known: and in the Peutinger Table there is no doubt, as the Oxus is given separately by its name.

<sup>21</sup> Tarn, *op. cit.* pp. 231-34. Of course a town 're-founded' did not always stand on the old site.

<sup>22</sup> Strabo, XI, 524.

<sup>23</sup> Presumably meaning 'corn-land,' 'The Sown.'

though clearly referring to the Alexander-name, are the words "Hic Alexander responsum accepit.<sup>24</sup> Usque quo Alexander"; and below that again a picture of two altars, which I shall come to. The Peutinger Table then would alone suffice to show that this northern Antioch replaced Alexandria; but important confirmation is given by the proceedings of Demodamas.

Demodamas son of Aristides was in 299/8 a prominent citizen of Miletus; he was the proposer of the decree for Apama of that year,<sup>25</sup> and of the decree for Antiochus I which closely preceded it,<sup>26</sup> and was one of the three commissioners charged with setting up Apama's statue.<sup>27</sup> At some period after 293 he was the Seleucid *strategos* of Bactria-Sogdiana; he is called *Seleuci et Antiochi regum dux*,<sup>28</sup> a phrase which can only refer to the joint rule of the two kings,<sup>29</sup> 293-280, when Antiochus I governed the East. Two things are known of his activity in the East: he crossed the Jaxartes, and he built 'altars' to Apollo,<sup>30</sup> the two things being in some way connected. When Alexander was building Alexandria-Chodjend, he had to cross the river and drive away the nomads who were threatening him from the northern bank<sup>31</sup>; as no Greek king ever sought or attempted to hold anything north of the river, Demodamas' crossing may have served much the same purpose as Alexander's, in connection with the building of the new Antioch. As to his altars. Pliny, after mentioning 'Alexandria in the farthest bounds of the Sogdians,'<sup>32</sup> says that altars had been set up there (*ibi*) by Heracles, Dionysus, Semiramis, Cyrus, and Alexander, whose expeditions all ended there; Alexander's altars there are mentioned again by Orosius.<sup>33</sup> The first three names are mythical, and if Cyrus set up altars it must have been at his own foundation Cyropolis (probably Uratube) and not at a city which in his day did not yet exist.<sup>34</sup> There can therefore be no doubt that the two altars already mentioned which appear in the Peutinger Table below Alexandria are meant for Alexander's; the story

<sup>24</sup> This story, that the gods forbade Alexander to go any farther here, as they also did at the Beas, is not preserved in any extant Alexander-historian.

<sup>25</sup> For the decree see Holleaux, *Rev. E.G.* 1923, p. 1.

<sup>26</sup> *OGIS* 213.

<sup>27</sup> Holleaux, *id.*

<sup>28</sup> Pliny *H.N.* VI, 49 (from Demodamas). *Dux* is στρατηγός.

<sup>29</sup> So again Pliny, VI, 58, Seleuco et Antiocho praefectoque classis eorum Patrocle.

<sup>30</sup> Pliny, VI, 49: transcendit eum omnem Demodamas, Seleuci et Antiochi regum dux, quem maxime sequimur in his, arasque Apollini Didymaeo statuit. Fr. Stahelin, *Seleukos I* in *PW*, 1921, col. 1231, said that according to Rehm's dating in *Milet*, I, 3, p. 262, Demodamas' crossing of the Jaxartes must be before 299/8; and R. Hennig, *Terrae Incognitae*, 1936, p. 173, citing the same passage in Rehm, said that Demodamas' expedition was connected with the campaign which Seleucus undertook in 299/8 to strengthen and widen his rule over Asia. But Rehm has not a word

about Demodamas' campaign; what he said, after dating the decree for Apama in 299/8, was 'wir kommen auf das Jahr nach der Ehrung des Antiochos, für die Anregung des Demodamas (his proposal of the decree) vielleicht sogar in eben dieses Jahr.' The theory of Stahelin and Hennig is completely refuted by the words *Seleuci et Antiochi regum dux*; long ago, U. Wilcken dated Demodamas' campaign correctly, *Antiochos I* in *PW*, col. 2451. No such campaign of Seleucus' as Hennig supposes is known; 299 was the year of his alliance with Demetrius the Besieger, their meeting at Rhossos, and his marriage to Demetrius' daughter Stratonice.

<sup>31</sup> Arr. IV, 4.

<sup>32</sup> VI, 49: oppidum . . . in ultimis eorum (the Sogdians) finibus Alexandria ab Alexandro Magno conditum. Arae ibi sunt &c.

<sup>33</sup> I, 2, 5: (Tanais) praeteriens aras ac terminos Alexandri Magni in Rhobascorum finibus sitos.

<sup>34</sup> *Ibi* in Pliny, VI, 49 is ambiguous; it could mean either Alexandria or the *finis* generally.

must have been that he set them up, like his altars on the Beas, when the gods forbade him to go farther. Demodamas' altars therefore, which he set up to Apollo of Didyma, ancestor and patron of the Seleucids, and which were connected with his crossing of the Jaxartes, must have been connected with the new Antioch as Alexander's had been with his Alexandria.

Antioch 'in Scythia' was therefore Alexandria-Chodjend refounded.

Antiochus then, while he governed the East, had on his hands a very considerable Saca invasion; if three Greek cities as far apart as Merv, Termez, and Chodjend were destroyed, it might have developed into something like the invasion of Parthia in 129 B.C., had it not been energetically met. Doubtless a horde from north of the Jaxartes joined in the invasion, and Demodamas, in crossing the river, clearly the final operation of the war, was driving them back to their own place. The cities destroyed may have only had mud walls, usual in Sogdiana, as Alexandria-Chodjend certainly had<sup>35</sup>; it is possible that the Sacas, whose confederacies south of the Jaxartes were not entirely nomads, had learnt how to take a place by raising a mound against the wall, as the horsemen of the Chaldean tribes are said to have done.<sup>36</sup> But also the Greek element must have been much diminished since Alexander's death by Peithon's massacre, the wars of the Successors, and Seleucus' conquest of the country (between 311 and 305) from the satrap Stasanor,<sup>37</sup> who was popular in Bactria and had much support from the Bactrian Greeks<sup>38</sup>; quite possibly the walls were undermanned. Certainly, when it was over, Antiochus must have brought out a large number of new settlers; probably he laid the foundations of the future prosperity of Greek Bactria.

This Saca invasion can be approximately dated. Mr. E. T. Newell<sup>39</sup> has recently deduced, from a comparison of the earliest Seleucid issues of the mint at Bactra with those of Seleuceia, that the mint at Bactra cannot well have been opened before 289 B.C., and was therefore opened by Antiochus I when in the East. Now he went eastward in 293; and if he did not begin coining at Bactra till 289 and then coined continuously, it is natural to suppose that the Saca invasion fell between 293 and 290. This is confirmed by the activities of his generals. There were two *strategoi* of the Bactrian-Sogdian satrapy during his rule in the East, Demodamas (already mentioned) and Patrocles<sup>40</sup>; and as Patrocles' exploration of the Caspian was undertaken for commercial and not military reasons and points to a time of settled peace, Demodamas and the war must come first. Patrocles was with Seleucus in Syria in 285,<sup>41</sup> and was sent by Antiochus to Asia Minor soon after Seleucus' death in 280,<sup>42</sup> when Antiochus himself quitted the East; Patrocles' time in Bactria must therefore fall

<sup>35</sup> The wall took only 20 days to build, Arr. IV, 4, 1.

<sup>36</sup> Habakkuk, i, 10.

<sup>37</sup> Justin, XV, 4, 11.

<sup>38</sup> Diod. XIX, 48, 1.

<sup>39</sup> *The Coinage of the Eastern Seleucid mints from Seleucus I to Antiochus III*, 1938, p. 230.

<sup>40</sup> Patrocles' date: Pliny, VI, 58, Seleuco et Antiocho (see note 29 above). Strategos of Bactria-Sogdiana: Strabo, II, 74, ὁ τῶν τότεων ἡγεσάμενος τούτων Πατροκλῆς.

<sup>41</sup> Plut. Dem. 47.

<sup>42</sup> Memnon 15 (FHG III, 534).



between these two dates, which means that Demodamas' last possible year is 285, or more probably 286; as he had been successful, and is not heard of again, he presumably died. His crossing of the Jaxartes, as I have pointed out, may mean that Alexandria Eschate was already being rebuilt at the time; also he survived the war long enough to write an account of it; it should then have been over well before 286, which may bring us again to 289 and the opening of the mint at Bactra by Antiochus. Closer than 293-290 for the Saca invasion one cannot get; but the natural supposition, though it cannot be proved, would be that the actual year was 293 and that it was this threat which caused Seleucus to send his son to the East. One regrets the loss of Demodamas' book,<sup>43</sup> which doubtless told the whole story. But if one considers this invasion together with the later invasion of the Parthian satrapy by the Parni, one sees clearly, not only why Bactra became such a great fortress, but why Diodotus, and after him Euthydemus, felt that the dangerous north-eastern marches could not be properly governed from Syria or even from Babylonia, and that the man on the spot must have the authority and power of decision which could belong only to a monarch.

It appears then that the Greek city at Tarmita-Termez was successively an Alexandria, an Antioch, and a Demetrias, just as the Greek city at the mouth of the Tigris was successively an Alexandria, an Antioch, and 'Charax of Hypsaosines.' One had hoped that the Russian excavations at Termez might ultimately throw some light upon it. Objects from these excavations were exhibited in 1936,<sup>44</sup> but were apparently of the 10th to the 14th centuries A.D.; I have not heard of the work reaching the Hellenistic strata, and presumably further information will not now be available; two finds are known from the neighbourhood, but they do not help much.<sup>45</sup> However, thanks to Indian and Chinese information, some of the obscure Greek cities of the Farther East have begun to emerge from the shadows; and we may be grateful to the Thibetan translator who, by identifying the Sanscrit Dharmamitra (Demetrias) with Tarmita, has enabled three more of the recorded Greek city-names to be located and has thus thrown fresh light on the history of Antiochus I. But he can hardly be right in saying that Dharmamitra was the *origin* of the name Tarmita; for that name, as the form Antioch Tharmata shows, was there before Demetrius, and it was certainly the native name of the place, which, when the episode of Greek rule was over, came back again, as was usual, and has lasted to the present day.

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<sup>43</sup> Hennig, *op. cit.* p. 172, thought the list of peoples in Pliny, VI, 50, was from Demodamas. But some names come from Herodotus and the Alexander-story; and it is only one of Pliny's usual lists, combining his notes from many sources; see *auctorum*, VI, 51.

<sup>44</sup> G. Salles, *Rec. de Paris*, XLIII, 1936, p. 144.

<sup>45</sup> In 1932 a fragment of a Graeco-Buddhist sculptured cornice was found in the Oxus, 13 km. below Termez, but seemingly it came from a stupa

and is later than the Christian Era: H. Field and E. Prostov, *Amer. Anthropologist*, XXXIX, 1937, p. 475. In 1938 M. Masson published from Tashkent four square Greek bases, from places near Termez, which once carried circular disengaged columns, though but little of these remains; thanks to Professor E. H. Minns I have seen his drawing, but it is too small to show details. Of course Greek coins have often been found in the ruins of Old Termez.

## NOTES

**The Date of the Adonia** (Vol. LVIII, p. 183).—When discussing the date of the Adonia at Alexandria I stated, on the authority of Dr. F. Heichelheim, that an unpublished papyrus in the Rylands collection connected Adonis with the late-Ptolemaic month Gorpaios. P. Petrie 3.142, which Glotz had shown to relate to the Adonia, gives the 7th of an unnamed month as the date, and, assuming the month to be supplied by the Rylands papyrus, I placed the festival on one of the first days of September. After further study of the Rylands papyrus Dr. Heichelheim now thinks that it contains no mention of Adonis, and this combination therefore falls to the ground. A date in the late summer or early autumn is in my opinion sufficiently established by the other evidence, and as my argument is therefore not much affected, I had intended to withhold this correction until publication of the Rylands papyrus enabled me to supply a precise reference to it. In the present circumstances, however, it seems desirable to place it on record now.

A. S. F. Gow.

**The Stoa Basileios.**—The American excavations in the agora at Athens, while solving many problems, have left others unsolved, and have even raised unsuspected difficulties. One of the most important points of dispute is the identification of the Stoa Basileios. H. A. Thompson's theory<sup>1</sup> that the winged building at the north end of the west side was both the Basileios and the Stoa of Zeus Eleutherios seems to me to be the most convincing solution, though, as he says, the present state of knowledge does not leave the problem finally settled. Even if one sets aside the complicated topographical, chronological and sculptural evidence, the balance of which probably favours Thompson, certain recent rival claimants to the title Stoa Basileios are open to grave doubts on the ground that they were not stoas in the normal classical sense of the word.

A. Rumpf<sup>2</sup> contends that the 'Hellenistic Building' north of the Market Hill was the Basileios. The Hellenistic Building<sup>3</sup> was a rect-

angular hall with an entrance on the short west side and two interior rows of supports. Its position and date involve difficulties; but in any case it is not a normal stoa. The only precedent of good date given for calling such a building a stoa is one of the large stoas of Elis, which also had two interior rows of columns forming three aisles; but the Elean building may have had the usual open colonnade along one long side, making a very different type of plan; it is restored in this way in the plan in *Öst. Jahresh.* XVI (1913), *Beiblatt.*, p. 147, fig. 40. The Hellenistic Building is like a certain type of basilica,<sup>4</sup> but a connexion between the Stoa Basileios and the basilica is still a very unsafe assumption suggested by the names. The normal stoa and the basilica in any of its forms are different in principle.

The word 'stoa' in classical and Hellenistic Greece—whatever associations it may have acquired and however it may have been related to 'basilica' in Roman times<sup>5</sup>—implied essentially an open colonnade. This could consist of a single row of columns with a back wall (Stoa of the Athenians at Delphi); it could, and usually did, have an interior row, or two (the Elean stoa, Stoa of Philip at Megalopolis; and it could have projecting wings (Thompson's Basileios, Stoa of Philip at Megalopolis, Stoa of Antigonos at Delos). In any case openness on one long side was normal.

The Basileios became *the* stoa for the Athenians,<sup>6</sup> rivalled only by the Poikile. In trying to identify it among the remains one would expect to have to look for a typical stoa. The fact that Thompson's Basileios is typical—the form with gable wings was perhaps the best that could be made of a single freestanding stoa—should count a little in its favour and against rivals.

In a note in the same issue of the *Jahrbuch*<sup>7</sup> W. Judeich endorses W. Dörpfeld's identifica-

<sup>4</sup> The 'Greek' type; G. Leroux, *Les Origines de l'Édifice Hypostyle*, 281, 288; V. Müller, *The Roman Basilica*, *A.J.A.*, XLI (1937), 250 ff.; Leroux gives (272 ff.) what is perhaps the most reasonable explanation of the word 'basilica'.

<sup>5</sup> G. Downey, *A.J.A.* XLI, 194 ff.

<sup>6</sup> Andocides, I, 82, 85; see W. Judeich, *Topographie von Athen* (2nd edn.), p. 335.

<sup>7</sup> *Arch. Anz.*, p. 382.

<sup>1</sup> *Hesperia*, VI (1937), 64-77, 225.

<sup>2</sup> *Jahrbuch*, LIII (1938), 117 ff.

<sup>3</sup> *Hesperia*, VI, 345, Pl. IX (2).

tion of the Basileios as the building which the Americans call the fourth-century temple of Apollo Patroos: the annexe on the side, he agrees, is suitable for an archive-room but inappropriate for a temple: but is the form of the whole building at all appropriate for the title of stoa?

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known locally as the 'Dabbia', on the promontory north-west of the modern town but within the circuit of the ancient walls.<sup>1</sup> The soil was shallow, 2 m. being the maximum depth attained by any trench: moreover the deposits seemed to have been disturbed, for bits of late black-glaze vases or pottery of Roman date were in all cases found, together with earlier material, on bed-rock. In one trench I uncovered the remains of a house in which lay sherds 5 and 6,



FIG. 1.—SIGILLATA FROM LESBOS.

**Sigillata from Lesbos.**—During a fortnight's trial excavation, which I made at Methymna in 1929, certain fragments of sigillata came to light. These obviously required treatment by an expert, and Mr. Pryce most generously undertook to examine and publish them. As a prelude to his paper, I add a short note on the circumstances of their discovery.

The excavation, summarised on p. 223 of *JHS* XLIX, consisted of trenches in the area

while below the floor were other examples of sigillata. Nowhere, however, were they common, the only recognisable forms being the ones illustrated in fig. 1. The rest of the pottery was composed of the 'grey wares' published on pp. 1 ff. of *JHS* LII, fragments of black glaze,

<sup>1</sup> See Koldewey, *Die Antiken Baureste der Insel Lesbos*, pl. 4-5.

and pieces of coarse red or yellow domestic ware.

W. LAMB.

The interesting sherds of sigillata found by Miss Lamb at Methymna appear all to belong to the fabrics of the Eastern Mediterranean, and include samples of the two main wares found on eastern sites, the white-clay and the red-clay, the latter predominating. For the problem presented by these two wares it will suffice to refer to Mr. J. H. Iliffe's valuable paper, *Sigillata wares in the Near East in Quarterly of the Department of Antiquities in Palestine*, 1938, pp. 4-53. The current view is that of Eilmann (*AM* 58, 1933, p. 30) that both wares are Samian: the red pottery being made from the mountain clay, the white from that of the coastal lowlands. There is much probability that Lesbos obtained sigillata from some neighbouring source of supply; but the fabric of Tschandarli remains the only class of eastern sigillata of which we can speak confidently, and until the sigillata pottery sites of Samos have been located, it will not be possible to be sure of what is and what is not Samian ware. I have to thank Mrs. Crowfoot and Dr. T. Davies Pryce, who were kind enough to examine the pottery and to make many valuable suggestions, some of which I quote verbatim; many others I have tacitly incorporated.

I. A group of three sherds distinguished by their whitish-buff clay; the varnish bright brownish-red with a tendency to flake. On this ware see the summary in Iliffe, *op. cit.*, p. 11 (bibliography on p. 7).

1. Part of a flat dish with plain rim, curving side and flat base-ring. Thick fabric: varnish darker than the others of the group and matt with very little or no lustre, which is probably an indication of early date. The low rectangular foot is typical of eastern plates: cf. Technau, *AM* 54, 1929, fig. 37 (Samos). In the west the Haltern form. Loeschcke, Taf. X. 4a, is similar, but here the foot is triangular and comparatively high. These somewhat featureless dishes have a long history going back into black-varnish days, and may be considered the forerunners of the Haltern Arretine type. On the date of this example Mrs. Crowfoot writes: 'Resembles flat dishes found at Samaria in a stratified area, and considered by Miss K. Kenyon to represent contents of houses destroyed in the building of the temple, and therefore dated to pre-25 B.C. Sherds of similar dishes came from an earlier level, making it certain that this class of dish dates from the first half of the first century or

earlier. See also the group of similar dishes from Samaria (*Harvard Excav.*, fig. 185, 2a-j); these were found in Vault Cistern 2, which was certainly closed by the beginning of the Augustan period. Compare also the bases from the Kerameikos, Oxe, *AM* 52, 1927, p. 214, fig. 1, nos. 1, 2, 3, which however are finer and decorated with palmettes.' The dish is therefore probably pre-Augustan or early Augustan.

2. Side of a curving bowl with small bead-rim; the complete section is not preserved. Excellent thin fabric, lustrous red-brown varnish. This form seems to be a descendant of the Megarian bowl; cf. *Pergamon*, I, 2, Beiblatt 41, 2. Loeschcke's Haltern type, Taf. X, 13, is allied; in the East, Heberdey, *Ephesos* I, p. 173, no. 46, and Technau's Samian cup, *AM* 54, 1929, p. 49, fig. 39, appear to be coarser and later. Mrs. Crowfoot again refers to Vault Cistern 2 at Samaria. *Harvard Excav.*, fig. 185, nos. 8a-d, noting 8b with a late Hellenistic base. Pre- or early Augustan, representing the finest phase of the fabric.

3. Part of side and base of a bowl, somewhat as the preceding, but of coarser fabric; the external varnish patchy and thin. Dr. Davies Pryce suggests a comparison with Loeschcke's Haltern type 12. First half of first century A.D.

II. A group of fifteen fragments of pink micaceous clay. On this fabric see Iliffe, *op. cit.*, pp. 7 and 9.

a. Seven fragments (4-10) with bright lustrous varnish and excellent finish seem to be approximately of the Augustan age, contemporary with the early period of Arretium. Nos. 8-10 may be somewhat later than the others.

4. Part of a deep bowl with high vertical plain rim; a trace of a horizontal handle. Bright red surface with excellent even lustre. Cf. Zahn, *Priene*, no. 134, also *AA* 1932, p. 258, fig. 11, no. 14, from Ankara ('sehr häufige Form augusteischer und fruchtiberianischer Zeit').

5. Base of a small cup or bowl, with a splayed base-ring; a rouletted circle on the inside. Fine thin fabric: varnish more patchy than the last. There is not enough left to give the shape, but the foot of Loeschcke's Haltern type 12 may be compared.

6. Fragment from a small cup of thin fine fabric, comprising an upright plain rim and a horizontal handle, much as *Priene*, no. 134. Fabric not unlike that of the last; the surface worn on the exterior.

7. Part of side and floor of large plate with plain rim; thick but good fabric. Probably of the same form as no. 1.

8. Part of the floor of a flat dish; there is a high triangular base-ring. Duller and darker varnish than on others of this group; the glaze thin and applied only on top, the underside being left matt; hard fabric. The floor has a tendency to dip at the circumference, as Loeschcke's Haltern type 1a; and for the triangular base-ring compare *id.* types 1a, 2a, 4a, 5a. Probably early first century, derived from an Arretine model.

9. Lip of plate or dish; the lip channelled off from the side and turned down; on the outer edge is modelled egg-and-tongue pattern. Thin good fabric. For similar rims *cf.* Oxe, *AM* 52, 1927, p. 214, nos. 5-7 and p. 217; *Harvard Excav.*, fig. 185, 6a; and see further Loeschcke, *Haltern*, pp. 137 ff. Dr. Davies Pryce considers the form a precursor of Loeschcke's Haltern type 1a: the technique of the present example seems to place it in the latter end of the group.

10. Small bowl with collar-rim: convex lower side: plain base-ring with cone inside. Fabric hardly so fine as in the preceding examples; probably somewhat later in date. A familiar shape in both West and East; *cf.* from Haltern, Loeschcke's type 12; from Samos, Technau, *AM* 52, 1929, fig. 43.3; from Tschandarli, Loeschcke, *AM* 27, 1912, pl. XXVIII, no. 19. First half of first century.

(b) Nos. 11-18 represent a later stage; the varnish more blotchy and more thinly applied; or part of the vase is left unvarnished.

11. Flat saucer restored from five fragments; it had been repaired with metal clamps in antiquity. Three circles are carefully incised on top of floor. Plain rolled rim: no base-ring but the floor is slightly domed. Varnish good on interior, on the exterior of poor quality and applied on the lip only, the bottom being left unvarnished. Probably Tiberio-Claudian; not far removed from the preceding group. For the form *cf.* Loeschcke, *Haltern*, pl. XIV, 75B.

12 and 13. Two fragments of plates as the last, but of inferior fabric and presumably later. The exterior is again unvarnished except for the rim.

14. Foot of a 'pedestal urn': perhaps a late rendering of the form Courby. *Vases grecs à relief*, fig. 97, no. X. Thick fabric: washy varnish with a high lustre externally, duller internally.

15. Fragment of plate; probably of same form as no. 7, but the varnish is much thinner, the brush marks more visible.

16. Part of shallow dish with high concave rim. The varnish is growing pale and lustre-

less. This is a common form in the east; *cf.* Knipowitsch, *Keramik aus Olbia*, p. 51, fig. 12, nos. 2, 3. About mid first century. I am inclined to regard this piece as a remote imitation of Loeschcke's Haltern type 2a; see Drag. 17 and Oswald and Pryce, *Terra Sigillata*, pl. XLII, 3, 7, 8, 9.—T. D. P.)

17. Side of a chalice very much as the Tschandarli type Loeschcke, *AM* 37, 1912, pl. XXVIII, no. 10, but later, the mouldings simpler. Fabric much as the two preceding numbers, with pale thin varnish. Mid first century; for a western parallel *cf.* Ritterling, *Hofheim*, type 47. (This is the only piece in this group for which we had a really good parallel at Samaria; we had several fragments of chalices near to Tschandarli 10, all in reddish wares.—G. M. C.)

18. Side of small bowl with rim slightly inverted. Thin good fabric, but again the varnish is thin, pale, and lustreless. Much as Loeschcke, *AM* 37, 1912, pl. XXXIII, no. 17 (Tschandarli), or Knipowitsch, *Olbia*, pl. II, no. 26.

III. The three sherds in this group are of late fabrics in which the sigillata tradition only faintly survives.

19. Curving side of bowl; slight off-set rim with step on interior, grooved lines on exterior. Clay greyish in inner fracture, pink and micaceous on the surface. The interior is unvarnished; on the exterior are remains of yellowish-brown varnish (it may be a burnished slip.—G. M. C.). For the form compare the Tschandarli shape 28, Loeschcke, *AM* 37, 1912, pl. XXVII. The clay is perhaps related to that of group 2, from which however the sherd is probably separated by a long interval of time. The yellow tint of the varnish recalls late sigillata in the west. ? Third century.

20. Side of bowl with small collar-rim, a moulded line beneath it, and a band of shallow rouletting about its exterior. Fine hard fabric of well-washed clay, baked uniformly to a bright pink colour. No varnish, except on the exterior of the lip where are traces of a faintly lustrous colour.

Apparently of the Late C Ware of Waage; see *Hesperia*, II, 2, *Roman and Byzantine Pottery*, p. 298, fig. 4. See also Technau, *AM* 54, 1929, fig. 42 (Samos), and Knipowitsch, *Olbia*, fig. 12, 6. This may be compared with the Marne Ware of the west. Late third century.

21. Fragment much as the preceding; the rim deeper and flatter, with two rows of moulding.

F. N. PRYCE.

## NOTICES OF BOOKS

**Buried Empires: the Earliest Civilisations of the Middle East.** By PATRICK CARLETON. Pp. 290; pl. 13 & 2 maps. London: Edward Arnold and Co. 1939.

In the preface of this book, which the author describes as a textbook, he acknowledges his aim to have been to provide 'an easy introduction for the general reader—particularly for the Student of Classical or Modern History or Divinity—with a branch of historical study, our knowledge of which has been enormously enlarged in the last two decades.' He has, I think, done it on the whole rather well. He is equipped with sound instruction and a grasp of the place of history in the modern world. He has himself read the documents in the original with understanding, and thought about them, and makes us aware that behind what is clearly a pseudonym there stands a perhaps little known, but not the less genuine archaeologist. His style is lively, on the other hand, and shows a vigour and refreshing effectiveness which are usually denied to our *confrères* more adept with the spade than with the pen. Although only the oldest phase of history down to about 1600 B.C. is dealt with in this book, nevertheless within that field the history, archaeology and excavations in general are dwelt upon, and the field is wisely extended to include the momentous discoveries in Mohenjo-daro and Harappa. Within those sufficiently large limits the material is shaped and presented in a way which is quite easily apprehended, even sometimes seeming quite arresting. Some will be particularly interested by his observation that Dungi, King of Ur, about 2100 B.C. was the first on record to introduce compulsory military training!

Of course there will be many points with which the specialist may disagree—for example, about grey and red wares at Troy (p. 46); in the chapter concerning India there are many slips, of which perhaps the most surprising is the allusion to the use of iron by the Aryan invaders of India: the word employed in the Vedas to which reference is made surely has its alternative meaning of copper, and Caldwell's views to the contrary are out of date: again, it is mistaken to speak of a single Dravidian race, or of all Dravidians as uncivilised. In the Meso-

potamian chapters the author is more at home, though he displays in spelling some hesitation between Marahsi, Marhashi, Parahsi and Barahsi, which are all the same place. Lastly, so swiftly has the current of discovery been running in these parts, that in many respects his information, at the time of writing sound enough, is now outclassed and rendered out of date, especially *e.g.* by operations at Mersin and at Mari. Chiefly as a result of the excavations at the latter, the accepted chronology of the 2nd and 3rd millenniums B.C. has begun tottering like a modern currency; and our information concerning the great Hammurabi is in process of being transformed. The author recognises this in an Appendix. In spite of these qualifications, this book should find much use among the intelligent section of the public. It may still be hoped that another volume will one day appear to carry down the story to a later date.

R. D. BARNETT.

**Die Träger der kretisch-mykenischen Kultur, ihre Herkunft und ihre Sprache. II Teil. Italiker und Urillyrier: die Sprache der Etrusker.** By VLADIMIR GEORGIEV. Pp. 160. Sofia. 1938.

Dr. Georgiev's theory is a development of the intense study in recent years of the language of the Illyrians, who now fill the gap left by the disappearance of the Pelasgians. 'Primitive Illyrian,' according to this theory, was the language of the earliest inhabitants of the Greek world, and is represented by the inscriptions of Lemnos and of Amathus. The Etruscans were the descendants of the 'primitive Illyrians' of Troy, and their language was a Thrako-Illyrian dialect (p. 99), and, therefore, Indogermanic. The Minoans were of the same origin (p. 143), and their language was presumably of the same character as Etruscan.

His theory enables Dr. Georgiev to propose with confidence many new etymologies of Latin and Greek words, for much of the vocabulary of both languages reflects sound changes that took place in 'Primitive Illyrian.' Thus, the phonological equation of Etr. *hece* with Lat. *iacet* gives the clue to the equation of Lat. *honor* with 'Prim. Illyr.' *\*yunos*, itself connected with Eng. *youth*.

We know now that *honos* meant originally 'youthful vigour.' The Latin pronoun *hic, haec, hoc* is, thus, seen to be the old Idg. relative *yos ge, ya-i ge, yod ge*. The Lat. *vapulo*, which gets -p (= Idg. b) from 'Prim. Illyr.', can now be cognate with Eng. *weep*. Most of these new etymologies are not convincing now, and may never be convincing: it is, at any rate, rash to use them, as Dr. Georgiev does, as a key to the interpretation of Etruscan.

J. FRASER.

**The Iberians of Spain and their Relations with the Aegean World.** By PIERSON DIXON.

Pp. 159: 23 pls. Oxford: Clarendon Press.

The Iberians early found rich homes for themselves, and chose to develop their own commerce and culture rather than to change the map of Europe. Recent research has recovered much of their civilisation from obscurity, but few scholars outside Spain and France know anything about it, and Mr. Dixon is the first to write of it in English. His book is compressed out of a larger study in Spanish, which was interrupted by Franco's rebellion: and he has wisely confined it to the 'Golden Age' of Spanish-Iberian history, from the sixth century to the third.

His purpose is not to put forward new theories, but to expound the latest authoritative views (the revision of Dr. Bosch-Gimpera is a guarantee that he has them, as Spaniards say, from good ink). But his book is not a mere *rechauffé* of ingredients from the library of Valencia de Don Juan: he has been over the archaeological material on the spot, with a discriminating eye, and his knowledge of the country gives perspective to his account. The illustrations are well chosen, and he can appreciate styles as well as classify types.

Hellenists will be especially interested in the far-reaching influence of Greece on Iberian art. It is only in the last few years that archaeologists in Spain and South Italy have seriously studied the impact of the western Greek colonies on their neighbours. The Iberian craftsman borrowed with both hands, and could give the flavour of an idiomatic translation to his Greek motives and designs.

In Mr. Dixon's generally sound narrative a few historical points must be questioned. He seems to swallow the 'Ligurian' theory (p. 21, against Bosch's advice. He blurs together the two waves of Celtic immigration (p. 4). He speaks as if the Lusitanians were pure Celts, and the Tartessians pure Iberians: whereas the former became extensively ibericized and the

latter were not quite 'ibers en sentit estricte.' The Iberian penetration of south France was more than 'occasional' (p. 9): Aeschylus was right when he said the Rhône flowed through Iberia. The Iberian name of Tarraco (p. 40) was probably Κίσαα (Polyb. III, 76) or Cissis (Livy, XXI, 60).

It is a hyperbole of scepticism to say that 'nothing certain is known of the [Iberian] system of administration' (p. 8). In fact, a fair amount can be credibly stated. Here the Roman sources are valid, and if Mr. Dixon had studied them he would hardly have entertained the conjecture that any administrative units were coextensive with the three main cultural groups (pp. 9, 65).

He erects the Carthaginian power in Spain before the Barcids into a land-empire, with fortresses at Tugia and Setefillas (pp. 49-50). The archaeological evidence does not prove so much. Schulten, indeed, bases a similar theory on Polybius' statement that Hamilcar ἀνεκτάτο τὰ κατὰ τὴν Ἰβηρίαν πράγματα τοῖς Καρχηδονίοις: but ἀνά is a small word to bear the conquest and loss of an empire. Mr. Dixon is led to suppose that the continued influx of Greek wares was due to re-export from Carthage: but it is easier to believe with Bosch that the Carthaginian blockade lost its force after Himera. A contemporary defeat at sea off Hemeroskopeion has been conjectured by J. A. R. Munro (*CAH* IV, p. 289).

The tables of dates and finds are useful, and the bibliography is admirably selected. Gómez Moreno's article 'Sobre los Iberos y su Lengua,' and Sir George Hill's notes on the coinage, will doubtless be included in the larger Spanish work which Mr. Dixon promises.

The foregoing criticisms are meant as a small contribution to the value of this larger work. They must not damp the welcome given to the present volume, which is both able and attractive. It deserves to be read by scholars, and by anybody else who can find pleasure in the study of an ancient, peaceful and ingenious civilization.

M. I. HENDERSON.

**Kerameikos. Ergebnisse der Ausgrabungen.**

**I. Die Nekropolen des 12 bis 10 Jahrhunderts.** By W. KRAKER and K. KÜBLER.

Pp. x + 266: 92 pls. Berlin: Walter de Gruyter & Co. 1939.

The authors give a complete presentation of three post-Mycenaean cemeteries, belonging to two different periods of the transition age, sharply divided by different burial customs. The subject is important, the book is important, but need it have been so long? Would not one

photograph on plate 6 have done for 4 and do nos. 3 and 4 on plate 9 merit  $1\frac{1}{2}$  pages of closely written text? Books are presumably written to be read, and even the publications of State-aided institutions should exercise restraint. Needless to say, the catalogue, the analysis, and the illustrations all show meticulous care and accuracy. Amidst this opulence of illustration there are two curious omissions—first, no plan of the relative positions of the cemeteries, the merest sketch would have made this clear; second, no illustration of a sub-Mycenaean pin.

Specialists will no doubt wish to know from the authors the precise stylistic value of each line and triangle. The less expert will find a shorter road via the illustrations; with the beginning on pl. 16 and the end on pl. 73, it should not be impossible to punctuate the intervening stages.

The general reader should not lose heart in the wastes of stylistic argument and miss Mr. Kraiker's summary (p. 165). He is, it appears, a disciple of the late Prof. Dörpfeld and holds that geometric motives in Greece must all spring from one source—the underlying Helladic peasant art that developed into Hellenic Geometric style. Professor Dörpfeld, however, was content to bring it from the now discredited orient, for example, from Al-Obeid. Mr. Kraiker's political convictions require a Northern origin which is less easy. Note the hit at the Achaeans for their neglect of Racial Purity (p. 167). The Dorians were the People. They, the new race—or almost new—were buried, each freeman with his sword, like the Germans (p. 172). When they achieved Racial Purity (p. 177), the style was born. No need to examine the archaeological evidence for this phantasy, Mr. Kubler does it for us (p. 219). The reviewer, being in a less delicate position than Mr. Kübler, is free to go even further, and to underline the fusion of motives and the continuity of type which constitute Attic proto-Geometric style, and to suggest that this vase style may perhaps reflect a period of appeasement, or even the synoikismos by which Athens was traditionally founded. If Mr. Kraiker is interested in, nay is determined to find, pure-blooded, exclusive, aristocratic Dorians, it is perverse of him to excavate in Attica, the home of Democracy: why not look for them in Laconia? S. BENTON.

**Perachora; the Sanctuaries of Hera Akraia and Limenia.** By HUMFERY PAYNE and others. Pp. xiv + 271: 142 pl. + 26 text figs. Oxford: Clarendon Press, 1940. 84s.

Payne came from the writing of *Necrocorinthia* to the excavation of Perachora, and the magni-

ficent material from that site, with his peculiar qualifications for its study, should have made the publication into a work of quite exceptional importance. Happily he had got so far in his work on it that this volume is essentially his—not probably at any point just as it would have been if he had finished it, but with certain exceptions his work. It contains a chapter on the terracottas which had from the beginning been allotted to Jenkins, and one on the inscriptions on stone by Wade-Gery; the rest, apart from notes by Bagenal (the house-models), May (coins), J. D. S. and Hilda Pendlebury (Egyptian objects) and Jacobsthal (an Asiatic bronze), being Payne's drafts on the topography and history of the site, the two temples of Hera Akraia and the finds associated with them, the temple of Hera Limenia and the objects in bronze and other metals from its votive deposit. The whole is edited by Dunbabin, who contributes two important sections of the chapter on bronzes and a lucid and modest preface.

The first chapter is a topographical and historical account of the promontory of Perachora in general and the sanctuary site in particular. It is instructive and fascinating, and though one would have sacrificed it for something where Payne's special knowledge is irreplaceable—the ivories, for instance, or the pottery from the Limenia temple—it is a thing one would be sorry to lose. The most interesting part is perhaps the discussion of why a district of no importance in prehistoric times, or from the Roman conquest to the present day, should have achieved such significance in the archaic and classical periods. A convincing reason is found. It is a pity that the identification of this sanctuary with the Ἡρᾶς τέμενος Ἀκραίας θεῶν where Medea buried her murdered children has to be rejected, but the arguments against it seem sound. The account of the other sites, and of the town connected with the Heraion, is valuable, as is the preliminary publication of the largest and most interesting of the cisterns vital to the waterless town.

The geometric temple of Hera Akraia, treated in Chapter II, raises points of great interest. It was itself apsidal, and in connexion with it were found models of several such buildings, in painted clay, which for the first time give us an idea of the appearance of buildings of the middle of the eighth century or earlier. They were found in a pure geometric deposit, with pottery running from the middle of the ninth century to c. 725 B.C. Payne shows them to be Argive. His account is supplemented with an interesting essay by H. Bagenal on the technique



of building represented. The deposit gives a series of Corinthian geometric vases which, brilliantly handled by Payne, really clarifies the hitherto rather obscure history of Corinthian ceramics before the fine late geometric group with which Johansen begins his study. With them were found a number of bronze pins, spits and fibulae which give important evidence for the dating of types. The documentary value of this deposit is increased by the fact that the deposit of the temple of Hera Limenia begins, on the certain evidence of the pottery, just about the time that this deposit ceases. A contribution to the discussion on the use of spits: might they perhaps be hair-pins, the knobs fulfilling the function of the waves in a modern hair-pin—to prevent them from falling out? In the geometric deposit were found three scarabs, which Pendlebury dates to the XXVIth Dynasty—i.e., after 640 B.C. This curious situation is paralleled at Artemis Orthia. We cannot explain it in the present state of our knowledge, but it is a salutary *memento mori* for the confident dater.

Almost all traces of the second temple of Hera Akraia, built on a different site, were destroyed by the building of the third, of late sixth-century date, but its existence is demonstrated by a votive deposit, beginning about the time that the geometric one ends and lasting till the Hellenistic period. This deposit is thin compared to that of the Limenia temple, but contains some interesting pieces and, most important, a closed deposit of late seventh-century date, which clarifies the dating of many types of small, slightly decorated vases. A few points: p. 94, pl. 25, 1–2: is not this related to the conventional pomegranate? p. 100, pl. 31, 1: a similar odd scene is shown on a subgeometric vase from Ithaca of local make: pl. 31, 2: hardly an *aryballos*—*hydriskos*?

The third temple shows interesting architectural features, and some fine fragments of acroterial sculptures were found; also a good bronze on the temple floor and another outside. An interesting triglyph altar is also published. It was built in the late fifth century or early fourth, at the same time as a stoa whose publication is put off to the next volume. The altar is published here as being directly connected with the temple.

Chapter IV deals with the temple of Hera Limenia, built in the mid eighth century on a simple plan, the most surprising feature of which is an internal altar—a very early element. There are some fine painted roof-tiles from a re-roofing of the mid seventh century. Of the wonderful deposit of votives from the *temenos*

only the bronzes and terracottas are published here. Chapter V, on the bronzes, is largely the work of Payne, and gives greater scope than any other section of this volume for his knowledge of and feeling for archaic art. Especially illuminating is the characterisation of the Protocorinthian lion and dove, and, arising from that, a suggestion of likeness between Protocorinthian and early red-figure. A brief excursus like this restores one's faith, too often shaken, in the value of pure aesthetic criticism.

The bronze vases were not treated by Payne, but Dunbabin provides a careful and interesting account of them. Most notable is the large series of phialai found in what had evidently been a sacred pool; also some kotylai and oenochoi which give us the metal originals often conjectured for ceramic shapes. To the remarks on the use of the phiale, one might add a reference to a red-figured sherd from the Acropolis (Graef und Langlotz 396, pl. 129) where a long-haired, olive-wreathed boy is shown drinking from a phiale in the presence of Athena. Of the section on personal ornaments, the parts dealing with fibulae and pins are by Payne. The discussion of the fibulae is interesting, particularly the points of contact and contrast with the finds from other sites.

Jenkins's chapter on the terracottas is made the basis for a general classification of the archaic Corinthian works in this medium. The classification is convincing, and the author moderates the tendency he sometimes shows to docket all his objects neatly in five-year periods. There are some very fine plastic vases, notably an exquisite Protocorinthian snake; and also some good terracottas imported from other centres. The author is to be congratulated on identifying, very convincingly, the first representation of the Birth of Venus (183)—a most extraordinary piece. P. 208, no. 44: I doubt if the rosette is 'purely decorative'—rather a beauty-spot; of the parallels cited, those on the lion stylise its furry face, while those on the arm and thigh of the Gorgon are surely pimples or blains emphasising her repulsiveness.

The volume closes with Wade-Gery on the inscriptions on stone: three very interesting and early pieces, unfortunately only scraps, but even so with important historical bearings.

The illustrations are good, and the book is beautifully produced. A guide from the plates to the text would have been useful, and slips and misprints are to be found, but not many. The editor's task was as difficult as it was important, but it could not have been better performed.

MARTIN ROBERTSON.

**Handbuch der Archäologie. Lieferungen I und II.** Pp. 238 and 403; 112 pl. Munich: C. H. Beck.

These are the first two parts of what is intended to be a general handbook of archaeology in the Greek and Italian fields and in other countries so far as they have relevance to Greece and Italy. The publishers expect it to be used by specialists wishful to acquire a wider outlook, as well as by persons ignorant of the subject or already learning it. They have, however, fallen between these stools. The authors have been told to mention everything which matters, and they cannot be encyclopaedic so briefly without becoming useless to anyone without a good deal of knowledge of each subject. As a work of reference on points of detail there is much to be said for this handbook—in particular the section on Egypt will be invaluable—but there are few chapters, so far, which can be read through with sufficient ease to form a coherent picture.

The general articles at the beginning may be interesting, but have little practical value. Buschor leads off, with 'The Scope and Methods of Archaeology.' Koepf writes 46 pages on what he calls a 'History of Archaeology,' but it is really a Who's Who of classical archaeologists—which is followed by disproportionately short summaries to cover the Prehistoric and Near Eastern fields, and by a misleading and inaccurate list of notable excavations. Wiegand writes on the monuments and how to treat them; and in an appendix to this Regling explains the value of coins. In the next 35 pages von Bissing goes into some detail on the scripts of Cyprus and Crete, scamping the others of the Near East; he gives a comparative table of many Semitic alphabets and the Ethiopic syllabary, but no sign lists for any form of Egyptian writing, Hittite hieroglyphs, or even cuneiform, though there are photographs of texts in all these. Rehm's article on 'Greek and Italian Inscriptions' supplies just as much information in 55 pages as can be digested, and covers the ground with reasonable balance: to one who is not an epigraphist it seems highly commendable.

Part II opens with Pernice on 'The Literary Evidence for Archaeology in Classical Authors'; I can't imagine anybody wanting to read it all. An article by Arntz on 'the Scripts of Northern Europe' is beyond the capacity of a casual reader. Schweitzer writes 40 pages on 'The Problem of Form in Ancient Art,' with the usual number of long compound words like development-rhythm. Menghin on 'The Old Stone Age' has 30 pages fluctuating between racial theories and catalogues of sites—interesting in

parts. Scharff has 200 pages on 'Egypt' in which a general view can be obtained in spite of the enormous mass of detail, which seems fairly complete. But it is so condensed that the less factual side is crowded out and there is a tendency to omit things of general interest, like the question of whether the Gate of Medinet Habu is under Syrian influence or of common style, though reference is made to an article treating the subject.

The plates are clear half-tones, usually several to a page, and often too small for their purpose.

A. W. LAWRENCE.

**Études d'archéologie grecque = Annales de l'École des hautes Études de Gand.** Pp. 153; 10 pls. 1938.

An important volume, especially for the study of Delphi. Y. Bequignon attempts to explain the Itinerary of Apollo from Olympus to Delphi, suggesting that the Homeric Hymn was influenced by various legends current at the time of its composition. Bidez treats of the discovery at Trier of an inscription in Greek verse in praise of Hermes. Demargne, on the relations between Crete, Egypt, and Asia, shows how opinion has veered in different decades of scholarship, especially on the question of the Keftiu and the routes whereby the exchange of objects and the interpenetration of cultures were effected. Flacelière writes on how the oracle worked in Plutarch's time, going into the question of the possible existence of an exhaling fissure. In 'Delphi pediments', de la Coste-Messelière studies the composition of late archaic pediments at Delphi (the Alemaeonid temple of Apollo and the Athenian Treasury). Picard writes a slight article on nereids and sirens as part of the folklore of the sea, illustrating the sea-monster group from Locri.

A. W. L.

**Outline of Greek Art.** By J. R. ELLIOTT. Pp. 107; 12 pls. New Zealand: Whitcombe and Tombs, Ltd. 1939. 7s. 6d.

As the foreword explains, this book was written 'in an attempt to meet the need for a text-book on Greek Art as covered in the subject Greek History. Art and Literature in the University of New Zealand.' The syllabus there lays special emphasis upon sculpture, and this accounts for the disproportion among the divisions of this book—architecture receives 16 pages, sculpture 68, and vases 10.

The difficulties of teaching Greek art adequately in the Antipodes, where original material, if not completely lacking, is available only in

very small measure, are well known to the reviewer, and Mr. Elliott deserves every congratulation on his courageous effort to overcome them. His book, however, will be of real use only to those who can attend his lectures or are already fairly well acquainted with the subject; this is especially true of the section on sculpture, where many of the statues listed would be almost impossible to identify without some previous knowledge. Could not references have been inserted to illustrations in one or other of the standard works upon the subject (e.g., Richter's *Sculpture and Sculptors of the Greeks*), or even to Winter's *Kunstgeschichte in Bildern* to facilitate identification? The other chief deficiency is that the book is not up to date in many places: here the fault must be attributed to ill-stocked libraries and the scarcity of periodicals available locally. Almost no account has been taken of the more important discoveries of the past few years or of recent researches on sculpture and vases, with the result that some of the older theories have been allowed to stand unmodified. This is most noticeable when archaic works are under discussion, and it is a pity that the author had not had an opportunity of consulting Payne and Young's *Marble Sculpture from the Acropolis*.

The section on architecture is compact and well set out: the list of temples at the end needs some revision, especially in regard to dates (e.g., the temple of Zeus at Agrigentum cannot be as early as 530 B.C.), and might be extended to include the temples at Paestum and Selinus, which are of particular interest and importance. The section on vases suffers from undue compression and lack of acquaintance with recent works on the subject (particularly on the early vases); nor is the difference between the work of potter and painter (e.g., Brygos and the Brygos Painter) made clear.

There are several slips and misprints throughout the book, but few are misleading (p. 33—for the sculptor's use of models, see Wace, *Approach to Greek Sculpture*, p. 106—confusion has arisen between the Talos krater in Ruvo and the Pelops amphora in Arezzo). In view of the limitations the author has imposed upon himself in the text and the almost complete absence of references of any kind there, the select list of books of reference might well have been considerably extended, and more books of illustrations included: Beazley and Ashmole's *Greek Sculpture and Painting* should surely find a place in it, as one of the best introductions to the subject, and in the vase section it is rather surprising to find no mention of Beazley's name, except as a translator. Twelve pages of illustrations complete the volume, mostly taken from

casts in the Museum of Classical Archaeology, Cambridge. These have not been well reproduced, and in many instances do no sort of justice to the original, being misleading rather than informative. It might have been wiser to omit them altogether and, as suggested above, substitute references to standard works on the subjects dealt with.

A. D. TRENDALL.

**Myth and Allegory in Ancient Art.** By ROGER HINKS. Pp. 135; pl. 32. London: The Warburg Institute. 1939. 18s.

This book reproduces three lectures, profusely illustrated and with an introduction "to deal more fully with aspects of the problem which could only be hinted at in the spoken version." The titles of the lectures (*Dike: the symbolic representation of natural order*, *Themis: the symbolic representation of social order*, *Mnemosyne: the symbolic representation of mental order*) are worth quoting as illustrating what seems to the reviewer a major fault in the work. That is, the Procrustean treatment of material in order to fit it into a scheme pre-existing in the author's mind. This strikes the reader at many points. *Dike* stands for the way of external nature, *Themis* for the social ordering of humanity. Is this a true view of *Dike* in Greek usage? Occurrences of the word in Homer which first spring to the mind do not seem to support it.<sup>1</sup> In any case it is a generalisation which should have been reached on inductive grounds and supported by a wealth of examples. These are lacking. The train of thought at the beginning of ch. iii. is typical. Starting with a brief account of the development of *ψυχή* from Homer to Socrates, it asks, 'What effect, if any, did the Socratic picture of the soul produce upon the iconographic invention of the fourth century?' Passing by way of "individualised" portraiture and allegorical portraiture, which are described in one sentence as possibly due to the spread of Socratic ideas, we find ourselves plunged at once in a discussion of artistic representations of Poet and Muse.

Greek religion is divided into two traditions, the 'Olympian' and the 'Orphic.' (This abuse of the latter label, even though only 'for the sake of convenience,' seems to nullify the efforts of those who have sought to demonstrate the individual character and comparatively modest achievements of the Orphics, and invites

<sup>1</sup> E.g. *Od.* iv. 691, xi. 218, xiv. 59, xix. 168, xxiv. 255. The author's authority seems to be Miss Jane Harrison rather than any primary source.

the return in full flood of Wilamowitzian criticism denying all meaning to the term.) The two are described as spatial and temporal respectively, the religion of static being<sup>1</sup> and the religion of becoming. There is truth in this, but again the rigidity of the framework repels. It is curious too to read that 'Orphic time' is 'absolute and continuous,' Olympian is 'the rhythmic series of alternations.' Is not the κύκλος of Orphic lore relevant here?

The introduction draws the distinction between myth, allegory and logic which is the basis of the work, and says some interesting things, *e.g.* about the relationship between myths and rites. Other terms too might well have been defined, notably 'symbol' and 'daemon.' Jargon like 'paramythic,' 'depersonalising,' 'spatialisation,' 'experienceable' is unnecessary and does not put one in the mood to give close attention to such a sentence as: 'The mutual confirmation of this movement of the mind afforded by the various symbolic expressions of the Greek genius is at once a demonstration not only of the coherence of that mind itself, but also of the equivalence of its symbolic presentations; in analysing the parallel structure of the latter, we are enabled to establish the former.' Yet it needs attention. Something, it seems, has been achieved. But it taxes the mind to say exactly what.

It is difficult to resist the conclusion that the results attained are scarcely commensurate either with the pains that have obviously been taken in the assembly of so much material, or with the elegance of the book's production and the beauty of its illustrations.

W. K. C. GUTHRIE.

**Last Lectures.** ROGER FRY. Pp. xxix + 370; figs. 346. Cambridge: University Press. 1939. 21s.

This volume contains the inaugural lecture which Fry gave as Slade Professor at Cambridge, which was published at the time, and the further lectures which he gave in that capacity, now for the first time edited from his notes with the minimum of necessary revision. These lectures constitute the beginning of a general survey of

art, and lead us from Egypt to Greece by way of Mesopotamia, Crete, Africa, America, China, and India. At Greece unhappily this peregrination was stayed, and we must greatly regret the loss of Fry's observations on Northern, Byzantine, Mediaeval, Renaissance, and Modern art, which would have been perhaps even more interesting in some cases than what he has left us. It is specially unfortunate that the book terminates with the Greek section, the section that will naturally be of greatest interest to classical scholars, since this section shows the faults of Fry's method more clearly than any other.

Fry's great merit as a critic is that his criticism was always based on his reactions to works of art, and not on vague generalisations of one sort or another, and this led to independence of judgement and a refreshingly different angle on hackneyed subjects. But there is a danger in this method both of allowing the judgement to be over-biased by some superficially disagreeable quality in the works under consideration, and of contradictorily reacting against accepted judgements. The operation of both these forces is observable in his treatment of Greek art. That he was capable of overcoming the first when not encouraged by the second is evident from his treatment of Indian art which he confesses he disliked at the beginning of his enquiry, and through whose strange welter he guides us to an understanding of much of real significance and beauty. But his dislike, amounting to an obsession, of highly finished surfaces and his natural and to some extent justified irritation with the exaggerated adoration bestowed on it by earlier critics, lead him to an estimate of Greek art which can only be described as insensitive. Of course it must be admitted that different people react differently to the same work. Some for instance may remain relatively unmoved by the early Chinese bronze utensils from which Fry derives such acute pleasure; indeed, the amphisbaenic Ram vase (fig. 147) may be considered a singularly tasteless object, and the Kuangs that follow it little less distasteful, but one may still feel that Fry's reactions to Greek art contain a real element of prejudice. The choice of the illustrations is in itself evidence of this, for they betray themselves as chosen to illustrate a thesis of the faults of Greek art. I do not think anyone not directly connected with the Berlin Museum has ever postulated great aesthetic merit for either the standing (fig. 298) or the seated (fig. 301) Goddess in that museum, and yet these, with the New York Kouros, whose merits are not universally recognised, are the principal ambassadors of the Archaic period.

<sup>1</sup> Because it is the religion of the satisfied and comfortable. In Mr. Hinks's scheme the Ionian cosmographers are directly in this tradition. This will interest, and possibly annoy, another schematic writer, Prof. Farrington, who in his *Science and Politics in the Ancient World* wishes on political grounds to make the Ionians the champions of enlightenment against the comfortable Olympian religion. A plague on both your houses, say I.

When he does illustrate a first-rate work, the running girl from Eleusis, his comment allows of dissent rather than discussion: to Fry it failed altogether to give any feeling of movement. If one finds it, on the contrary, one of the most successful of all statues expressing motion, there is no more to be said. From the Eleusis figure he passes to a comparison of archaic Greek and Romanesque art on the basis of their representing a similar point of development in two cultures, and points out a greater vitality in the Romanesque work which may in a sense be admitted, but then, to drive the attack home, he asserts that the Greeks were unable to compose a rhythmically united group, instancing as an example a section of the Mausoleum frieze, which, apart from the fact that it is only a section of a long decorative composition, is surely out of place when the comparison was originally instituted between Romanesque and archaic Greek.

In reading the passage on the Olympia sculptures, which are accused of a calmness and fundamental lack of emotion entirely unsuited to their subject, one can only register entire disagreement with Fry's reading of these figures, and one is forced to turn back to his admirable exposure of expressionism in the third lecture to convince oneself that the worst excesses of that unfortunate movement would not be his aesthetic ideal. Vases, again, are dismissed with the dogmatic assertion that "the Greek draughtsman was prevented from giving this evocative power to his line by two things, first his incapacity to feel the relation of an object to its surroundings—his isolation of the object: and secondly by his desire for perfection, for an even continuity of curve regardless of what it expressed," whereafter he threatens the admirer of this type of line with finding himself confronted by the example of "all great draughtsmen from Giotto down to Degas" against him, and only the doubtful allegiance of Durer on his side. Again we cannot escape the impression that a comprehensible dislike of the texture of Greek vases and of the relation of the decoration to the pot prevented him ever seriously applying his critical judgement to them at all. The Parthenon gets rather better marks, and on later Greek art, perhaps because it has received less adoration, his judgement is more sympathetic, and though one may think that he somewhat under-estimates the achievements of Roman portraiture, in general no one will quarrel with his estimate of Roman art.

In considering the above criticisms it should be remembered that the classical sections are

certainly the least satisfactory in a book which is full of observations of the greatest interest and value, by a critic whose judgements, when free from prejudice, were among the most sensitive and inspiring of his generation. The editing of the volume seems to be admirable, and the difficult task of identifying the illustrations to which Fry refers has been, on the whole, carried out with success, but there are a few mistakes among these. Fig. 14 reproduces a bronze by Maillol where Fry speaks of a stone carving. Fig. 265, described as "side view of Fig. 264," is, in fact, a reversed enlargement of the sinister profile shown in that Figure, and Figs. 306 and 307 show the two Caryatids of the Siphnian treasury, the latter correctly described, the former incorrectly as from the Cnidian. But these are minor blemishes in a book in which the quality and quantity of illustrations are excellent value for the price.

GILES ROBERTSON.

**Archaic Sculpture in Boeotia.** By F. R. GRACE. Pp. vii + 86; 36 pls. Harvard University Press: Cambridge, Mass.; Humphrey Milford. 1940. 26s. 6d.

Mr. Grace has produced a well-illustrated book written in a pleasant style. He isolates and classifies Boeotian terracottas, dates them by contemporary plastic vases, and fits some marbles into his classification. He should then be in a position to date his other marbles. Boeotian terracottas Group A (p. 30) is represented by figs. 17-19. The painting seems homogeneous, but our concern is with figure style. There is a common denominator—ugliness—but that is not enough: not all ugly terracottas are Boeotian, still less Boeotian Group A. To find the date, turn the page. Joy! fig. 21 is a nice Corinthian: but what has she to do with her supposed contact fig. 20? Worse and worse! Fig. 20 is another view of the arch-horror fig. 17. The marble contact offered is fig. 22, a little hard on the marble, perhaps, but how can such a wreck be used to date anything? Or try another marble contact: compare fig. 42 with fig. 43 (see p. 68). Not such a glaring contrast but surely no resemblance.

Turning to the marble series, it is a pity that Mr. Grace did not include even one photograph of Thebes Museum no. 1 (p. 54) for clearness' sake. This is his earliest Boeotian statue, and so very important to his story. It is dated by him with the Kouros of Sunium about 600 B.C. (p. 56). It is interesting to compare his arguments with those of his predecessor. Mr. Lullies (*JDI* 1936) says the Kouros of Sunium has an

inner organic harmony; Thebes I has not got this harmony; therefore Thebes I need not be contemporary with Sunium. Mr. Grace says that Sunium is inorganic, Thebes I is also inorganic. Organic harmony is achieved about the middle of the sixth century; therefore Thebes I must be earlier than this discovery.

Inorganic and Organic Style are vague subjective terms. The outstanding objective fact in connexion with Thebes I is the treatment of the 'inscriptions.' Is that treatment at Thebes more likely in 600 B.C. or about 530 B.C.? Similarly the protrusion of the front of a lady (Grace, fig. 11, Hampe R4: see also Hampe, pl. 37, R3) was a characteristic noted by Payne at Corinth, and dated by him to the third quarter of the seventh century at Corinth; it is unlikely to be earlier in Boeotia, as Mr. Hampe's dating would require.

Mr. Grace, Mr. Hampe, and Prof. Ure have all made stylistic classifications of Boeotian artefacts. If none of these systems is satisfactory, it must be because style-less objects cannot be classified or dated by what they have not got. With this reservation, the reviewer hopes that *Archaic Sculpture in Boeotia* may be regarded as the last word on this ungrateful subject, and that Mr. Grace will now turn to material more worthy of his industry and erudition.

S. BENTON.

**Corpus Vasorum Antiquorum. Denmark 6 = Copenhagen, National Museum 6.** By K. F. JOHANSEN. Pp. 33: 50 pls. Copenhagen: Librairie Einar Munksgaard. 1938.

The new Danish fascicule is entirely devoted to the South Italian vases in the National Museum of Copenhagen. They are not a very exciting lot, but several pieces of interest, hitherto unpublished, are included, and the more extensive the publication of Italiote vases becomes, the broader will be the basis on which to rest a definitive classification. Five plates are devoted to Early South Italian vases, five to Lucanian, two to Paestan, five to Campanian, twenty-one to Apulian, and two to minor or uncertain pieces. On the whole the classification adopted is extremely sound, and where the author feels doubtful he has said so, as with some of the vases which seem to fall stylistically midway between the fabrics of Apulia and Lucania. The reproductions are very good and the text which accompanies them accurate and up to date: for all who are interested in South Italian pottery it is in every way an admirable volume.

Some points of detail:—

Pl. 235. This vase seems to belong to the early Lucanian school, very close in style to (possibly even an early work of) the Primato Painter (cp. Naples 1762 and Berlin 3145), one of the two most important Lucanian painters of the second half of the fourth century. A list of his major works is given by Beazley in *AJA*, 1939, p. 633 n. 3.

Pl. 236, 2. This vase belongs to a small group of kraters, identified by Mrs. Oakeshott as the work of a single artist, the Winchester Painter, who takes his name from a bell-krater in Winchester showing (a) Dionysus seated between a maenad with a thyrsus and a b.f. kotyle and a silen with a situla, (b) three draped youths. There are two column-kraters, both unpublished, by this painter which are very near in style to the Copenhagen vase: Vienna 2165, (a) komos, (b) four draped youths, and Naples Stg. 39, (a) Offerings to a seated athlete, (b) four draped youths.

Pl. 237, 2. Two more gutti by the same hand are in the B.M. (*JHS*, 1921, p. 149, pl. 8) and at Naples (Stg. 313, both with Dionysiac scenes.

Pls. 238, 1, 239, 3 and 240, 1. As Johansen points out, these three vases are the work of a single painter—the other important Lucanian artist of the mid and later fourth century—to whom, as yet, no definite name seems to have been given. Mention has been made of his style, and a partial list of his works is given by Jacobsthal, *Die Melischen Reliefs*, p. 16 (see also Trendall, *Paestan Pottery*, p. 16, n. 31; *Frühit. Vasen*, p. 19, n. 26). Pl. 242, 1, is related in style to this group.

Pl. 245, 1. This is one of the most interesting of the newly published vases. For Marsyas with the knife in his hand we may compare the Marsyas fragments by the Amykos Painter in New York. In style the vase would seem nearest to the fabric of Cumae (cp. Naples 2855, Pattoni, fig. 54; Naples R.C. 144, Gabrici, *Mon. Ant.* xxii, pl. 97), but it also has affinities with the oenochoe from Adernò in the Hermitage (see Pace, *Atti Acc. Nap.* 1932, p. 341) with the drunken Herakles, the phryx calyx-krater in Lentini with a love-adventure of Herakles, and a calyx-krater with a komos formerly in the Lloyd coll. and now in the Ashmolean Museum. Pace argues a Sicilian origin for the first two on the score of provenience, but other vases from Adernò are surely Campanian (e.g., Benndorf, *Gr. u. Siz. Vasen*, pl. 45, 1, now Moscow 510), and the whole group may well be assigned to this fabric.

Pl. 257. By the same hand is a vase of similar shape in Naples (Stg. 321, *JdI*, 1912, p. 289, fig.

15), which Macchioro (*loc. cit.*) considers Lucanian—it has some of the features of this style about it, but in the main it seems rather Apulian, and Johansen is probably right in so classifying it.

Pl. 261. By the Lycurgus Painter (the painter of B.M. F 271, with the Madness of Lycurgus, and of many other vases); also on the borderland between Apulian and Lucanian, but nearer the former.

Pl. 270, 3. This rhyton is Lucanian of the latest period after the Primato Painter, when the style has become completely barbaric (cp. *CVA*, Cracow, p. 19, 2a).

A. D. TRENDALL.

**Glass Vessels before Glass-blowing.** By POUL FOSSING. Pp. xvi + 152: 109 text figures. Copenhagen: Einar Munksgaard. 1940.

In this book Dr. Fossing breaks new ground, for there has been no previous attempt to tell the whole story of glass before the invention of blowing. He has combed the available evidence thoroughly and has without doubt built a solid framework which can later be elaborated in the light of increasing knowledge.

It is in dealing with sand-core vessels—quite 90 per cent of his task—that Dr. Fossing is at his best, and it is a pleasure to know that this important subject has at last been well treated by a master hand. It is a pity, perhaps, that he consistently uses the term 'inlay' to describe the thread decoration: inlay suggests a cold technique, whereas the threads were applied and marvered flush when both they and the vase were warm and viscous. He is unable to decide (p. 133) whether the technique was first invented in Babylonia or in Egypt, but he will have none of the recent theory that it emanated from Syria, and he is also able to prove that its first great florescence occurred in Egypt in the reign of Amenhotep II (1448–20 B.C.), and that the technique was prevalent in Egypt until at least the first century B.C., apparently, however, with a surprising gap of 500 years between the XXI and XXVI dynasties. Meanwhile stray finds of non-Egyptian types at various dates in Babylonia, Greece and elsewhere suggest that these Egyptian factories, though predominant, had no complete monopoly.

Two other glass processes date back to very early times, although neither had any great prevalence before the Alexandrian epoch. In one, viscous glass was pressed into open moulds and usually finished by grinding and cutting when cold; in the other, glass vessels were cut

out of solid blocks, like stone vessels. Dr. Fossing, though citing instances of each from Mycenaean times onwards, is not careful to describe the techniques closely or to distinguish between them. Sometimes, as with the Ephesus fragment (p. 84), which stratigraphy dates to the fourth century B.C., his technical descriptions are frankly misleading; the ornament on this bowl is clearly ground and polished, not, as he suggests 'made in a mould.' The piece thus becomes, for there is no *prima facie* reason for doubting its stratigraphy, the earliest example yet known of decorative cutting on glass.

There is little existing evidence that the author has missed. To his amphorisks of the sixth to the fourth century may be added one found by Woolley at al Mina (*JHS* LVIII, 157, pl. xiii). As it belongs to the mixed levels vii–v, which ended c. 550 B.C., it is chronologically important. Further Spanish material is provided by *Catalechs dels vidres . . . Amatller* (Barcelona, 1925), nos. 31, 35, 56 and 81 (sixth–fourth century) and no. 79 (fourth–third century), all from Emporion, and by a valuable article by P. M. de Artiñano in *Bol. de la Soc. Esp. de Excursiones*, XXXVIII, 19 ff. The list of non-sand-core glass of Hellenistic date given on p. 104, note 2, is also capable of some extension.

Dr. Fossing is at times inclined to be too uncritical of earlier statements. A grave described as archaic by a seventeenth-century writer on Malta (p. 57) is possibly no earlier than Roman, and in default of a fuller description it is unfair to claim it as earlier: while on pp. 46 and 105 some fragments from Gezer which, from Macalister's illustrations, are clearly Roman, are listed as sixth–fourth century and Hellenistic respectively. He also repeats and emphasises (p. 130) an unfortunate error of Kisa's, who claimed that the decorations on his *Fadenbandglaser* were painted, whereas in reality they are applied glass threads marvered on the paraison before final blowing. It would be valuable to know what evidence the author has for saying that glass-blowing began during Hellenistic times (pp. 103 and 127); it may well have done so, but the statement is not so axiomatic as to require no proof.

The illustrations are clear and well chosen, though it is a pity that the outlines have been painted round, and that, although the reductions are not uniform, no scales are given, and the dimensions are often omitted even in the text. A series of type-drawings showing the development of shapes from period to period would have been useful, and perhaps also maps to illustrate the variant distribution of the sixth–fourth- and

fourth-third-century finds (pp. 78 ff. and 101 ff.).

But these are criticism of detail. The book, as a pioneer treatise, is clearly of extreme value and fills a notable gap in archaeological literature. Its main conclusions will stand the test of time, and there can in the future be no excuse for the appearance in print of the wild and unauthenticated statements that have hitherto been current in regard to the dating and history of early glasses.

D. B. HARDEN.

**Mythos und Sage bei den Griechen.** By LUDWIG RADERMACHER. Pp. 360. Baden bei Wien and Leipzig: Rohrer. 1938.

This is an important and interesting book, a long essay on comparative mythology by an author well equipped to examine it. After a brief introduction, in which he pays courteous tribute to the work done in this field by British scholars, the book falls into two main parts, the first theoretical and the second practical. The former is divided into a number of sections, partly historical in contents: *Anfänge einer Auseinandersetzung*; *Die Vergleiche*; *Philologen und Archäologen*; *Mythos, Sage, Märchen*; *Zur Technik des Vergleichs*; *Herkunft und Alter*; *Archaische Form und ihre Dauer*. It needs only to read these titles to see that questions are discussed on which every mythologist must form an opinion, if his studies are to result in more than the retelling of old tales. The reviewer is not always in full agreement with the author's views (to go into the larger points in dispute would need as much space as the book itself and must therefore not be attempted here), but gladly records his sympathy with such remarks as those on p. 39, on the danger of paying too much attention to mere comparison of motifs in traditional stories; on p. 41, where a good word is said for the amateur researcher; on p. 79, which speaks wisely on the inconsistencies of mythical chronology. P. 67, which distinguishes *aitia* from myths, is controversial to a degree: pp. 93-4 waste ingenuity in finding a parallel which does not exist to a detail of the tale of Bellerophon; p. 109 shows Radermacher too easily persuaded of the 'Indo-Germanic' (at least he does not call it Aryan) origin and continuance of certain stories; p. 113 makes the remarkable geographical discovery that Wales is in England. But far more blunders, if they are all blunders, than these would be forgiven a writer who talks such excellent sense as that on p. 129 about certain sociological hypotheses concerning the position

of women which have been illegitimately derived from a number of ancient narratives.

The second part begins with a long account of the story of Jason. Radermacher does not believe, as Halliday, Meuli and I do, that there ever was an Argonautic story in which the other heroes played the parts of the adventurer's gifted companions in such *märchen* as Grimm No. 71. He makes out a good case, pp. 212 *sq.*, for Jason having originally been a magician: the question is worth further investigation. He spends the rest of the book, save for some short addenda dealing with minor points, in analysing the complicated legend of Theseus. One of his main theses here (p. 324 and the whole chapter) seems very likely to be true, that there were four principal tendencies at work. Firstly, Theseus was the Athenian hero *par excellence*: secondly, he was in greater or less degree the hero of several smaller places, such as Aphidnai and Trozen, which would not let their claims be neglected (indeed, it is by no means certain that the original Theseus, be he god or man, real or imaginary, had anything to do with Athens); thirdly, once his popularity and his connection with Athenian institutions were fully established, a vigorous process of whitewashing went on; fourthly, a fact long familiar, he was made into a sort of parallel or rival to Herakles. On such good foundations it is not surprising that an excellent discussion of the hero and his doings is built. Once more it would take far too much space to go into points of serious disagreement; on pp. 254 *sq.*, Radermacher thinks, I believe rightly, that Theseus did not originally merely forsake Ariadne, but I doubt if he was originally robbed of her and consider it more likely that, like so many heroes of fairy-tale, he broke some tabu and thus magically forgot her.

Misprints are not many. Notes 746 and 747 (pp. 340 *sq.*) should exchange places, and in Note 772 (p. 342) St. Andrews has become St. Andrew.

H. J. ROSE.

**Die Rituelle Totenklage der Griechen** (Tübinger Beiträge zur Altertumswissenschaft, 30 stes Heft). By EUGEN REINER. Pp. x — 124. Stuttgart and Berlin: W. Kohlhammer.

This is a convenient assemblage of the available material concerning lamentations for the dead; the author describes them after Homer and other authors down to Lucian, examines the various words signifying some kind of lament, discusses the relation between the custom and



contemporary beliefs concerning the dead, describes the associated ritual, has something to say of the possible connections with the Orient, and then goes on to analyse and interpret what is left of the dirges of Simonides and Pindar. Two sections, one on ceremonial mourning for Adonis and other figures of cult, the second on *encomia* of the dead, conclude the monograph.

It was not to be expected that anything very new would be said in such a work, for the ground covered is familiar enough. For the most part Dr. Reiner is accurate, thorough and sensible. It seems, however, worth while to notice a few matters in which views or those he adopts are disputable, or even, in the reviewer's opinion, completely false.

It may be said in general that he is a little too eager to find ritual significance in what the mourners do and say, down to small details. That mourning for the dead is a rite and may plausibly be connected with the ancient and deep-seated fear of ghosts (on which, by the way, he should have quoted Frazer) is perfectly true: but this ought not to lead an investigator to forget that the dead, in Greece or elsewhere, are often lamented because the survivors are genuinely sorry and in consequence do and say, or even sing, many things which are simply natural expressions of grief. The actions and words of Achilles, who is not in the least afraid of Patroklos' ghost, ought alone to prove this, if it needs proof.

In particular, on p. 85, when discussing Pindar, *fgt.* 129-130B Schroeder (114 Bowra), he lays too much stress on a single letter in Plutarch, *Mor.* 1130C. It is by no means certain that Pindar spoke of three roads in the other world, for the *τρίτη* on which this supposition is founded may, as C. F. Hermann pointed out, be nothing but a quite legitimate *γε*. On p. 89, his interpretation of *παλαιού πένθεος* in *fgt.* 133B (127) is put out of court by the fact that *πένθος* does not mean *Leid* but *Trauer*; I omit further discussion here, as there is no space for a re-statement and defence of my own views. On p. 113 the ghost of Alkestis the chthonian goddess stalks once more, and from Eurip., *Alc.*, 445 *sqq.* it is deduced that dirges were formally sung about her at the Karneia and at some unknown Attic festival. A little examination of the text shows that Euripides, of course anachronistically, means that poems both lyrical *ᾠδὴ ἐπτάτονον ὀρίαν χέλυν* and intended for recitation *ἐλύροις* will be presented at the Karneia and Panathenaia in commemoration of her wholly human devotion.

H. J. R.

**The *Oresteia* of Aeschylus. Vol. I: Introduction, text, translation. Vol. II: Commentary, Metrical Appendix, Supplement, Index.** By GEORGE THOMSON. Pp. 353 and 404. Cambridge: University Press. 25s. each vol.

When Pearson brought out Headlam's projected edition of the *Agamemnon* he did not know that there existed in King's College notes of Headlam's more extensive and more valuable than those which he himself was using. This material is taken by Professor Thomson as the basis of an elaborate and important edition which, in spite of faults, will remain for a long time indispensable to the serious student of Aeschylus. No one could have completed Headlam's work better than Thomson, for he is as much in sympathy with Headlam's principles of editing as he has already shown himself to be with his work in lyric metres.

The text is moderately conservative and, on the whole, a very judicious one. In some of the desperate passages Thomson prints with a confidence that not every reader will share, and sometimes he is too conservative (as in accepting *Ag.* 862), but there are few unpleasant shocks. Of his own emendations (about fifty) a reasonably high proportion deserve serious consideration. Thomson does not hesitate to disagree with Headlam; when he disagrees he seems to be right. Indeed, he could well have disagreed oftener. He has for example 'fair confidence' in Headlam's impossible treatment of *Cho.* 621-8, which asks us to believe that the chorus can be accused of 'honouring' (*σεβειν*) Clytemnestra's act because they have not yet explicitly condemned it; that (apparently) one choreutes could stop and contradict the other eleven in the middle of a stanza, and that *τίω δ' ἀέριμαντον ἐστὶν δόμων* can mean 'I praise a hearth where no fires (of passion) burn'—this being very like the method of exegesis neatly condemned elsewhere (note to *Cho.* 347 ff.): 'just as we might say in English "I took off my hat and wiped my feet."'.

There are three points of structural importance in which Thomson has followed Headlam wrongly (as I think), and all three show in Headlam a certain lack of dramatic awareness which is surprising. (1) Clytemnestra's speech *Cho.* 637-95 is given to Electra, who is supposed also to be addressed in v. 707. Several dramatic points can be made by this change (v. 707 for example will illustrate how Clytemnestra has been behaving to Electra), but all are points which Aeschylus clearly did not want to make. There is no appreciation of the fact that the

*Choephoroi* is not, like the two *Electras*, a study in Electra's personality and environment; that Sophocles' best material would have been lumber to this play. (2) *Ag.* 532, βωμοὶ δ' αἰστοὶ καὶ θεῶν ἱδρύματα, is deleted. Murray, more wisely, keeps it and notes 'id quod maxime timendum erat factum est.' Headlam wrote 'Is it conceivable that Aeschylus . . . or any Greek . . . could have put this statement as a proud boast in the mouth of a religious herald?' There is no reason for calling this a 'proud boast,' and very little for calling the herald 'religious,' while tragically the verse is one of the most effective ones in the play. (3) *Ag.* 618 f. are given back to the Herald; but it is quite contrary to the scale, build and spirit of the Aeschylean drama that the Herald should in this way comment on Clytemnestra's manners. (Headlam's treatment of ὡς after an adjective is unsatisfactory. It is not true that οὐκ αἰσχρὸς ὡς γυναικὶ γενναίᾳ must mean 'not discreditable for a noble lady.' In *Thuc.* II. 65, 11, where see Classen-Steup's note, πολλά, ὡς ἐν μεγάλῃ πόλει, ἡμαρτήθη does not mean 'many mistakes, for a big city,' nor does πιστός ὡς νομῆς ἀνὴρ (*O.T.* 1118) mean 'quite faithful for a shepherd'—as if shepherds were notoriously unreliable.)

Still more un-Aeschylean is the interpretation of *Ag.* 590 f., where σύν δὲ πλουτίζειν ἔμε is made to mean that the Herald will have a tip and the Elders share in the largesse, 'in accordance with Oriental custom.' Heralds don't receive tips, choruses don't share in them, Oriental custom is irrelevant, and Aeschylus was not one to obtrude such realism into this very non-realistic part of the *Agamemnon*. 'Clytemnestra,' Thomson adds, 'disappoints the Herald, who receives not even a greeting; for this behaviour of hers we are prepared by vv. 590 ff.' No, there is no preparation, and such illustration of Clytemnestra Aeschylus did not aim at. Side-lights like these are Sophoclean: the point here is that Clytemnestra has simply no attitude at all to the Herald.

Thomson is inclined to over-drive Headlam's use of glosses. There is evidence enough here that it is a valuable weapon, but one's confidence in it is strained when one is told that the MSS. reading at *Cho.* 415 is a conflation of two glosses on a corruption of what Aeschylus wrote; and it is not easy to believe, in spite of the glossing of δαίμων by τύχη, that Aeschylus asked Zeus to grant something, 'by favour of the guardian spirit,' τύχῃ δαίμονος (*Cho.* 780). Good play is made (especially in exegesis) with the principles of word-order in Greek, though they are a little too rigidly conceived, and occasionally too rigidly

applied. It is, for example, a little rash to alter ἀνὴρ ἀφαντος to θφαντος ἀνὴρ (*Ag.* 629; because the predicate normally stands first. So it does; but ἀνὴρ ἀφαντος feels much closer to ἀνὴρ, ἀναξ, βέβηκεν (*Antig.* 766, 1091) than to the common φίλος ὁ ἀνὴρ. This emendation is not characteristic, as elsewhere Thomson emends only where emendation is called for. Διὸς γὰρ δμβροὶ (*Ag.* 565), τολμήσαντα (*Ag.* 640), ἐμοὶ σέβας μόνον (*Cho.* 239), ὑπερύγην (*Cho.* 672) are typically neat suggestions.

The Introduction and the Commentary have many virtues; in particular, the 'summary of the plays' is very far from being the perfunctory thing that is too often given us. But unfortunately the editor's principles are such that the merits of his work are often obscured from the harassed reader. To say that the *Oresteia* 'should be expounded in the light of the general development of Greek art, philosophy and social institutions' sounds reasonable, but in the first place let it be light, and in the second, let it really expound the *Oresteia*. When the reader finds himself confronted now with a sketch of the social history of Greece, now with a very long note on the development of the figure of Eros, now by a reply to Tierney on the relation between Eleusis and Orphism, now by a detailed criticism of Gomme's *Population of Athens*, he feels that he is not having the *Oresteia* explained to him, but is assisting at a general discussion of Greek antiquities, perhaps 'with special reference to the *Oresteia* of Aeschylus.' Notes of great length fly off into space, so that the reader finds himself left in Australia or among the Indians of South America, from which places he has to work his own passage back to Argos; and the accumulation of illustrative quotations is very much overdone. Some points can be proved only by accumulation, but there seems little use in exemplifying 'the common idiom according to which τε . . . καὶ serve rather to subordinate than to coordinate' by one quotation and sixteen references, including references to Aristides, Lucian, Timocles and Heliodorus. The last of the sixteen, which makes the rest unnecessary, is to Denniston's *Greek Particles*. This uncritical piling-up of material is a blot on what is in the main an intelligent and an honest commentary.

The verse-translation rarely soars, and it is sometimes angular, but it is vigorous, free from translationese, and reasonably faithful. The experiment of rendering the lyrics in the original metres makes the translation very free where help is most wanted, but it is a decidedly interesting experiment, and on the whole the

preservation of the original rhythm adds enormously to the effect. The English dochmiacs can be very expressive: "He falls | into the bath, the foul | Treacherous bowl of blood. Such her skilled artistry" (*Ag.* 1119-21) is an example chosen almost at random. Very good too is

The arms clasp empty air, and soon  
The passing vision turns and glides away  
On silent wings down the paths of slumber  
(*Ag.* 432-4),

where the translator exquisitely catches the contrast between the slow rhythm of the first and third lines, with their eloquent prolongations, and the pictorially pure iambics of the second. Yet on turning to the Metrical Appendix I found to my surprise that Professor Thomson does not believe in prolongation. That is too big a point to argue here, but one question may be asked. When I recite the words 'By-bye Baby Bunting' my rhythm may conventionally be recorded -u-u-ü: when I sing or chant it (and the lyrics of the *Oresteia* were sung) my rhythm becomes -u-u-(u)-. According to the argument on II p. 335 this ought to shock the ear and (to some extent) obscure the sense. Does it?

H. D. F. KITTO.

**Griechische Papyri. Urkunden und Literarische Texte aus der Papyrus Sammlung der Universitäts-Bibliothek Heidelberg (Veröffentlichungen aus der Badischen Papyrus-Sammlungen, Heft 6).** Ed. by GUSTAV ADOLF GERHARD. Pp. 76. Pl. 3. Heidelberg. 1938.

The editor of this new part is a son of G. A. Gerhard, sen., who was in charge of the Heidelberg collection before the Great War. In his preface he gives the interesting news that there are fragments of Plutarch's *Pelopidas* among the unpublished papyri at Heidelberg, and that they will be published by Prof. Bilabel. Of the present little book Mr. C. H. Roberts has given a competent account in *CR* 53, 1939, 89-90, and Prof. K. Fr. W. Schmidt's review in *Gött. Gel. Anz.* 201, 1939, 149-52 should also be consulted. I shall not deal with the six documents Nos. 168-73, but only with the literary fragments. Some of them are not quite new—namely, 174 (Alkaios), printed first in *Dichl. Anth. Lyr.* 2nd ed., I 4, p. 227, parts of 178 (Timotheos?) in P. Grenf. II. 3 and of 180 (Comedy) in P. Hib. I, 5 and P. Ryl. I, 16 .a. Dr. Gerhard has taken great pains to provide the reader with a full introduction to each piece

and explanatory notes, but, as a beginner, he occasionally lacks discretion and gives superfluous or one-sided interpretations: for instance, on 175 (Comedy) 10 γεινιῖ γέρων: 'ist benachbart'. \*γεινιῖω hat auch die Bedeutung ähnlich sein', or on 180 Fr. H. 4, Col. II, 10. εἰν μὲν εὐθύς λουόμενος τύχη η[ι] (sic): 'Nun zwei Silben fehlen an diesem Vers.' He risks only a few additions of his own, and one of them, ἐ]μπροχέω, is clearly impossible. Among the composite adjectives mentioned in the introduction to 178 the word βαρβαραβρονται should disappear, cp. A. Korte, *Arch. Pap.* XI, 1935, 247. The only important numbers are this 178, a lyrical narrative with the names Kirka and Odysseus, 180 with Strobilos as a character, and the much smaller 176 'Schrift über Gotter-sagen.' On the Verso of 180 there is a glossary whose first column was first printed in P. Hib. p. 26:

ὄζος Ἄρης . . . . . s  
λαμπρός τὰ πολεμικά  
.] ζεύει βραίνει.

The editors, Grenfell and Hunt, supplied πε- at the end of l. 2 in order to obtain πεζεύει, but Mr. Gerhard is right in rejecting this, because all the lemmata in this short glossary begin with an omikron. He does not risk, however, an ὄζεύει, as he sees no evidence for it. I restore ὄζεύει, a dialect form of ὀδεύει, which is quite appropriately explained as βραίνει. It seems to be Elean, since certain inscriptions from Olympia write regularly Z for Δ, cp. Bechtel, *Griech. Dial.* II, 831.

Nr. 176 contains a quotation in hexameters which I have endeavoured to restore as follows:

εἶδος [γὰρ μεταθεῖ]ς τότε μὲν Κυλ[λήνιος ἀρνὸς]ς  
φωνήν καὶ μορ[φὴν πρόφερον,] τότε δ' οἰοπόλοιο  
κριοῦ ἐλιξέκ]ερω, τότε δ' εἰκέλος [αἰόλωι ἱππῶι  
δ]εσποινῇ λευκοῖ[ο μίγῃ πέδου,] ἄλλοτε ταύρωι,  
5 ὄφρα κάπρωι μ]εγάλῳ τέκοι ὅς[ϊκέλον τι πο]λέσσιν.  
ἄλλοτε [δ' ἀλλαχθεῖς οἱ] ἐφάνετο εἰς [μάλ' ἀπὸ πολλὰς  
ἀλλοίων θηρῶν [ἰδέας, θεός, αἶε] δὲ Ζεὺς . . .

1. The proper name has been suggested by Mr. Roberts, *loc. cit.* 2. I follow my friend Prof. P. Maas (Oxford) who proposed προφέρων and saw that ερω in 3 must belong to an epithet of the type εὐκέρως. The other restorations are mine. In 5 Mr. Gerhard thinks of ὅς[τερον. I take, of course, Pan as the child of the father in so many shapes. The fragment belongs to the early third century B.C. and is illustrated on pl. I. The volume is well indexed.

W. MOREL.

London.

**Mitteilungen aus der Papyrussammlung der Nationalbibliothek in Wien (Papyrus Erzherzog Rainer).** Neue Serie, III Folge: Griechische Literarische Papyri II. Ed. by HANS OELLACHER. Pp. 108. Pl. 1. Baden bei Wien. 1939.

Several reviews of this little book have appeared already, and Mr. W. G. Waddell's in *CR* 54, 1940, 47 gives an idea of its content. To his list of the fragments from extant authors I have to add two which have been identified recently: No. 41, by Prof. P. Maas (*Romanos*, XXIV, η<sup>1</sup> Pitra, cp. *Byzantion*, XIV, 1939, 381) and 42 by Prof. Wilhelm Schmid (*Isokrates*, 10, 24.26, published by Prof. Karl Fr. W. Schmidt in *Gött. Gel. Anz.* 202, 1940, 72). The latter review, seven pages long, will be indispensable to any student of the new collection, although many of its restorations are hardly defensible. As an addition to this and other previous reviews I should like to give a few corrections and interpretations in the numerous unidentified fragments.

Nos. 5-15 are epic except 14, which is elegiac. 5, 29 ]χρσιςσ. σεν. μεν the editor, but it is obviously ι χρσιςμ[η]σεν and the μ has been misread. No. 10 C (fragments of thirteen lines) 8-13:

η,] δ' ἐ μιν ποταμ[ος πάλιν ὤθεεν. ἡ δ' ἄρα μήτηρ  
 ε]πτουσ' ἀμφοτέρηισ[ιν  
 10 χ]αιτάων ἐρύουσα [  
 δ]χθησιν ποταμοῖο [  
 τ]οῦ δ' ὥστε [ἐν] σφακέ[λ]ωι  
 δ]φθαλμῶν ῥίζαι [  
 The restorations in 10 and 13 are Mr. Oellacher's, in 11 Mr. E. Lobel's, who kindly allowed me to publish it here; the editor prints π]άθησιν and declares ε]λθησιν possible. The other restorations are mine. For 9 cp. *Hom. Od.* φ 408 ἄψας ἀμφοτέρωθεν. The subject of these lines was perhaps Agaue and Pentheus, cp. 2 παιδός and 6 δαιδαλέου πέπλοιο, which, then, would designate Pentheus's female dress, cp. *Nonnos, Dionys.* 46, 109-110. Lines 1-3 are hopeless and 4, 5, 7 have not yet been restored satisfactorily.

13. Verso 3, not βαλεσσελ, but of course βαλέσσε λ [. . . 14. Verso 1, ἀκ]ρα δ' ιη δε[χε]ται seems more likely than the proposals in Mr. Oellacher's note. 15. 8-9 read:

ἀλκή δ' ἡμετέ[ρ]αισιν ἐνεσθ' ἄλις ἐν προ[λί]εσσιν.  
 τίσομεν ὕμετέρας ὕβριος βαρυα[λ]γέα λῶβην.

The editor has misread AΛIC to AAK, a frequent confusion. The two hexameters in succession show that elegiacs, of which one of his  
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advisers thought, are out of question. In 11 read certainly not ν δικον. ης but ]ναι κον[ι]ης.

To his No. 19 the editor gives the title 'Späterer Dithyrambos (?)'. I have a strong impression that the papyrus rather contains Aeschylus. As an example I quote Recto 10-13:

αἰν]όμαρον τύπον, δρακαίνης γόνον [  
 ]ραν καταντία βοῖ λασίωι φοινίαν βαλλ[η]ς [  
 ]ν μανείσαν ἄλλην μογεράν ἰνῶ δυσώ[νο]μον  
 ] Νυκτέως τὴν παιδάκρυτον . . .

In 12 μογεράν is in the MS., as Schmidt saw, but has been omitted by the editor. It is a pity that he should not have added such relevant parallels as Aesch. *Choeph.* 612 f. ἄλλαν δ' ἔστιν ἐν λόγοις στυγεῖν, φοινίαν Σκύλλαν and Eur. *Med.* 1282 f. I cannot here go into more detail on this startling fragment.

No. 23 Recto 3 (Comedy)

ῶ — υ — ] ἄλλ' αἰγοκρα[νί]ωι φέρων . . .

I do not agree with the editor's note on this new word formed like βουκράνιον. I should write Αἰγοκρανίωι and take it as a woman's name, a neuter like Abrotonon. Somebody brought the exposed baby (4 ἐκ τῶν σπαργάνων) to this lady.

No. 44 (where the lines should have been numbered) deals with Priapos and Dicysos, and Prof. H. Herter, the author of a valuable book on the former god, gives a good commentary on it. The Addenda and Corrigenda, pp. 89-96, are concerned with the first part of the series and should not be overlooked by those who use it. The plate gives photographs of six numbers and conveys an idea of the difficulties the editor had to cope with.

W. M.

London.

**Inscriptions grecques et latines de la Syrie, II. Chalcidique et Antiochène.** (Bibliothèque Archéologique et Historique du Service des Antiquités de Syrie, XXXII.) L. JALABERT and R. MOUTERDE. Pp. 247. Paris: P. Geuthner. 1939.

The appearance in 1929 of the first volume of this Syrian corpus, covering Commagene and Cyrrhestica, was signalled in this *Journal*, I. 152 f., where its scope and method were briefly described. During the intervening decade Professors Jalabert and Mouterde have pursued their task with admirable devotion and competence, and the present volume, nearly twice as large as its predecessor, marks a very important advance in their undertaking. It continues

the pagination and the text-numeration of volume I and is based on the same principles, though certain modifications have been wisely introduced, suggested by the criticisms of reviewers or the experience of the editors, and the 'Leyden system' of epigraphical symbols has been adopted.

This fresh instalment covers the territories of Chalcis and Antioch with the exception of Antioch city and the district of Seleucia, which will be included in a later volume after the conclusion of the excavations now in progress there. It contains 446 inscriptions, of which 84 were previously unpublished: apart from three Latin texts, they are all in Greek, either alone or, in nine cases, accompanied by Latin, Syriac or Arabic inscriptions. They belong for the most part to the second, third, fourth and fifth centuries of our era, a considerable number being precisely dated. Votive and building inscriptions, invocations, scriptural quotations and epitaphs form a large majority and, though few of them are of outstanding interest individually, together they throw valuable light on the language, racial elements, cults and architecture of this part of Syria and upon the early history of the Christian Church there. Many of the texts are carelessly engraved, ill spelled and poorly preserved, and we cannot look at such examples as Nos. 369, 407-8, 453 or 571 without realising the difficulties with which the editors had to contend. They have, however, done their work with noteworthy care and thoroughness, giving accurate descriptions (and in about fifty cases line-drawings also) of the inscribed monuments, full bibliographies (to that of No. 376 we must add *IGRom* III. 1009), critical texts and abundant commentaries. Grateful for what they have achieved, we wish them success in the continuation and completion of an enterprise which will be of the utmost service to the student of the ancient world or of the early Church.

M. N. Ton.

**Greek Mathematical Works, in two volumes.**

**Vol. 1. From Thales to Euclid.** Translated by IVOR THOMAS. Pp. xvi + 505; London: Heinemann. 1939. 10s.

The presentation of the subject-matter in a history of Greek mathematics is always a problem, as was observed by Heath at the beginning of his *History of Greek Mathematics*, and the best compromise between the purely chronological treatment and the handling of material by topics and subjects has probably been reached in that work. Thomas also agrees that this is the best

order of presentation, for his treatment of the subject—apart from a few small details, such as placing Theaetetus just before Plato and the duplication of the cube at the head of the Special Problems—follows exactly the order used by Heath in his first volume, as a glance through the tables of contents in both books will quickly show. An examination of the passages reveals an even closer correspondence. Of the 150 passages, only 7 do not appear in the parallel chapter of Heath, either as translation or exact references. These seven passages are:

1. P. 30. Nicolas Rhabdas, ed. Tannery (a piece of little consequence, quoted in *HGM*, ii, 551-2);
- 2, 3. P. 46. Two *Michigan Papyri* (something new and interesting);
4. P. 48. Eutocius in *Archim.* ed. Heiberg, iii, 242 (a simpler example of multiplication than that given by Heath on p. 57);
5. P. 326. Proclus, in *Eucl. I*, ed. Kioll, pp. 422-3 (on the origin of the circle-squaring problem);
6. P. 388. Aristox. *Harm.* ii, ed. Macran, p. 122 (an observation on Plato's lecture methods);
7. P. 400. Plato, *Epimomis*, 990c-1b (on the generation of numbers).

All of which shows how difficult it is to quote anything new when discussing Greek mathematics. Consequently the book forms an admirable companion volume and 'source-book' to the first volume of the *HGM*; but at the same time it is of independent value, for apart from the text and translation, the inspiring preface on the almost lost cause of Greek mathematics, with a survey of its history, the beginning of Chapter II on arithmetical notation, and the brief, clearly worded footnotes throughout the book, make it good and useful reading for those who would find Heath too voluminous.

To proceed to details. There is a fine boldness in the selection of passages, particularly in the treatment of Euclid. When we read in the *Summary* of Proclus the statement of Euclid's place in Greek geometry, we assent and pass on; but when, as here, we find definitions from the *Elements* placed under Pythagorean arithmetic and elsewhere, and reserved for the chapter on Euclid proper those matters which are peculiarly his own, both Euclid's debt to his predecessors and his own greatness are impressed vividly upon our imagination also, and the old thrill comes to us even more strongly as we read his achievements thus collected together.

The text of the work is, of course, drawn from numerous sources, most of them edited in the last

quarter of last century, for critical editions of the ancient mathematical writers do not pour daily from the press; it is, however, most pleasing to find two excerpts from Rome's edition of the commentaries of Pappus and Theon of Alexandria on the *Almagest*, which was published only four years ago, in 1936, for the criticism is often levelled with some justice at the Loeb Library texts that they are based on obsolete critical editions.

The translations are more literal and austere than Heath's (compare Thomas, p. 17, with Heath, p. 14), a good sign if the book is to appeal to Greekless readers; but there is one serious criticism that such people might justly make. This is the retention of Greek capitals in translation for the lettering of figures, a practice which creates needless difficulty for any thorough reader—especially when he is faced with such a passage as (p. 463): 'Let there be inscribed, also, in the circle ΑΒΓΔ the polygon ΑΞΒΟΓΠΔΡ similar to the polygon ΕΚΖΑΗΜΘΝ.' Heath, of course, with no Greek text to bother him, puts Roman lettering on his figures and in his text, but without strict regard for what the Greek letters were. It would be better to draw two figures, one with Greek and one with Roman lettering, and to adopt a standard system of transliteration. The following might well serve:

A = Α	I = Ι	P = Ρ
B = Β	K = Κ	Σ = Σ
Γ = Γ	Λ = Λ	Τ = Τ
Δ = Δ	Μ = Μ	Υ = Υ
Ε = Ε	Ν = Ν	Φ = Φ
Ζ = Ζ	Ξ = Ξ	Χ = Χ
Θ = Θ	Ο = Ο	Ψ = Ψ
Η = Η	Π = Π	Ω = Ω
Θ = Η	Ω = Ψ	Ϛ = Ϛ

In general, the book deserves to enkindle in its readers the fiery enthusiasm which possesses its editor; and the second volume may be awaited with similar interest.

A. P. TREWEEK.

**L'Antica Melurgia Bizantina nell'interpretazione della Scuola Monastica di Grottaferrata (Collezione Meridionale diretta da U. Zanotti-Bianco, Serie III).** By LORENZO TARDO. Pp. xxi + 402; pl. 44. Grottaferrata. 1938.

Of all the books published in recent years on the theory and practice of Byzantine ecclesiastical music, Dom Tardo's work represents the most extensive study. To do full justice to the author, we have to remember first of all that, being himself an excellent musician and choirmaster, he has undertaken to renew and to revive the

traditional Hymnody of Grottaferrata; and, further, that he has restricted his presentation of Byzantine music to examples which show the individual execution of Grottaferrata. Hence the difference between the interpretation of dynamic and rhythmical signs in the *TRANSCRIPTA* of the 'Monumenta Musicae Byzantinae' and the examples given by Dom Tardo. The best parts of the book, therefore, are those in which Dom Tardo gives his views as a musician who has gathered valuable experience from the musical and liturgical manuscripts of Grottaferrata. The student will welcome also the collection of theoretical treatises (pp. 151–260), now first published in full in a Handbook. Previously they were scattered in various books and reviews. The absence of textual criticism and of a detailed working out of the content impair the intention of the author in this, as in some other parts of the book.

One example may be given: Tardo gives on tav. II<sup>a</sup> the list of the ecphonetic signs, following Thibaut's essays on this subject, and quotes among them κρεμαστή ἀπέσω and κρεμαστή ἀπέξω, though I have shown already in my study on 'Die byzantinischen Lektionszeichen,' *Zeitschrift f. Musikwissenschaft*, XI (1929), that these signs did not exist; the names and their graphical representation in Thibaut's essay are the result of a misreading. There exists a sign called κρεμαστή and two others, called ἀπέσω ξξω. Tardo could have observed this from a photograph on the next page of his book (tav. III). The photograph shows Ms. 38 from the convent of Leimon at Lesbos and was taken by C. Hoeg during a journey which he made to the Near East in 1931 under the auspices of the Royal Danish Academy. Hoeg has published and discussed it in his 'La Notation Ekphonétique' (*Mon. Mus. Byz. Subsidia*, Vol. I. 2, 1935). It is a pity that the examples in Part III, demonstrating the combination of neumatic signs and their transcription into our staff notation, are in many cases not taken from musical phrases in manuscripts, but are invented by Dom Tardo, without regard for reality. It is e.g. unnecessary to give an example containing four ascending fifths (p. 271) as such a combination of intervals never occurs. It is an even greater mistake to give an example (p. 317) in which *Petaste* or *Petaste* with *Dyo Kentemata* is followed by an ascending interval, as the *Petaste* or the combination *Petaste* plus *Dyo Kentemata* is always followed by a descending interval.

The most valuable part of Dom Tardo's work is contained in the numerous and well-chosen facsimiles from manuscripts containing ekpho-

netic signs and different stages of Byzantine notation. These facsimiles are given in excellent reproductions. The care which has been bestowed on them and on the whole make-up of the book reflect the taste and guidance of Dott. Zanotti-Bianco, editor of the *Collezione Meridionale*.

E. J. WELLESZ.

**The Jews in the Byzantine Empire 641-1204.**

By JOSHUA STARR. Pp. vii + 266. Athens: Verlag der Byzantinisch-Neugriechischen Jahrbücher. 1939.

Dr. Starr explains his limitation of this monograph to the period from the death of Heraclius to the Latin conquest by the fact that this period has been comparatively neglected, though Andreades alluded to it in his five Jewish studies. He shows that, after 'the forcible Christianisation decreed by Heraclius, . . . each of the following three centuries produced an emperor who outlawed Judaism,' Leo III, Basil I, and Romanos I, but otherwise it normally enjoyed toleration. About 985 Nikon expelled the Jews from Sparta, in 1062 newcomers were excluded from Chios, and at the time of the Frankish conquest there were none in Athens, where there is now a synagogue. In Greece Salonika, now their chief resort, was already a Jewish centre: the Jews spread over the city, inspiring strong hostility, whereas at Bari and Constantinople they were confined in a *ghetto*, and the Thessalonian Jews believed in 1096 in the advent of a Messiah. Benjamin of Tudela found 2000, mostly tailors, at Thebes, and we have the epitaph of a Jewish dyer at Corinth, while their present agricultural work in Palestine finds a precedent in their farm colony near Delphi. Oria in Apulia was the centre of Jewish studies and the Apulian communities the most cultured, but the author considers as 'mediocre' the achievements of the Byzantine Jews as a whole. He finds only one instance of a Jew writing in Greek character. He estimates the 'Jew's tax burden' as 'no greater than the Christian's'; but none, except the emperor's doctor, might ride a horse, bathing with them was forbidden, and tanning was regarded as their speciality. It is curious to find a Jewish sect adhering to a different calendar, just as the 'old calendar men' in Greece still keep the system abolished in 1923. Two-thirds of the book are filled with elaborate notes, largely translations of the sources. There is a full bibliography, and a Hebrew tomb at Bari forms the frontispiece. For an English book printed in Athens it is singularly free from misprints.

WILLIAM MILLER.

**The Venetians in Athens 1687-1688, from the *Istoria* of Cristoforo Ivanovich.** Ed. by JAMES MORTON PATON. Pp. xiii + 104. Harvard: University Press. 1940.

The American School of Classical Studies at Athens inaugurates with this volume the 'Gennadeion Monographs' of mediaeval and modern Greek history. It contains two extracts on 'The occupation of Athens' and 'The Abandonment of Athens' from a manuscript in the Harvard College Library of the *Istoria della Lega Ortodossa contra il Turco* by Ivanovich, a canon of San Marco and a contemporary of those events. A Dalmatian Slav, then resident in Venice, he gave the official version current there of Morosini's campaign. His account of Athens was second-hand, and he gives the wrong date of the Turkish conquest, but of special interest to archaeologists is his description of Morosini's order to bombard the Parthenon. 'Informed that the munitions of the Turks with their principal women and children were in the Temple of Minerva, His Excellency ordered Count Mutoni to direct his bombs thither.' There follows a grim account of the havoc wrought. Otherwise the most valuable part of the book consists of the editor's notes from unpublished manuscripts in Venice and especially Florence, containing the bi-weekly reports of the Tuscan agents in Venice to the Grand-duke. The editor has added a biography of the author and four appendices, of which that on Mistra is historically noteworthy. The Italian text is difficult reading, for Ivanovich wrote an acquired language. The bibliography of this 'Gennadeion Monograph' curiously omits the Greek monograph on the same subject by Gennadios.

W. M.

**Ἐνθυμήματα Στρατιωτικά τῆς Ἐπανάστασεως τῶν Ἑλλήνων 1821-1833. Vol. I.** By NIKOLAOS K. KASOMIOULIS. Pp. lxxvii + 465. Athens. 1939.

This publication, edited with an introduction, biography, and notes by the eminent archivist, Blachogiannes, forms a valuable addition to the military history of the War of Independence. Its author, a Macedonian, initiated into the Friendly Society at Smyrna, assisted in the abortive insurrection of Olympos, which led to the death of his father and the capture of his mother and sisters. Turning southward, he was at Athens in 1822, where he found Odysseus Androntsos master of the Akropolis, and witnessed the election of the *δημογέροντες*. Moving to the Acheloos, where he was secretary of Stornares, he was employed on various missions to Maurokordatos and others, and was present at a con-

versation between his chief and Byron at Missolonghi in 1824, which is reported (p. 369). He described the proceedings against Karaïskakes, an example of the quarrels which marred the struggle, acted as secretary of the assembly at Aitoliko, and left for Nauplia with Maurokordatos at the close of 1824, where this volume ends. These personal experiences are preceded by a sketch of the 'military situation of Northern Greece before 1821,' written after the termination of the 'Memoirs' in 1841. This contains biographies of the *Armatoles* and *Klephts*, that of *Sornaes* based upon personal knowledge. The literary style of the work cannot be judged by a foreigner without presumption, for 'the language question' is one which Greeks alone are competent to decide. The editor, an admirer of 'demotic,' sums it up as 'the work of an illiterate officer in the language of military service,' and devotes several pages to a denunciation of *καθαρεύουσα*. A portrait of the author forms the frontispiece, and there is a facsimile of a page of the manuscript.

W. M.

Ἀνδρέου Μ Ἀνδρεάδου Ἔργα, III Ἀνάλεκτα.  
Ed. by K. CH. BARBAREOS, G. A. PETROPOULOS and I. D. PINTOS. Pp. 429. Athens. 1940.

This final volume<sup>1</sup> contains twenty-six articles and lectures of Andreades, of which nineteen are in Greek, five in French, one in English, and one in Italian. Their subjects are divided into three classes: 'historical and biographical,' 'the Philhellenes,' and 'political and diplomatic history.' The first includes an account of Otho and Amalia in exile at Bamberg, biographies of Roides, the author of *Pope Joan*; Maviles, the poet; and Bikelas, with a sketch of 'modern Greek literature.' The second deals with a subject of which the author was a past-master, modern English political history, with special reference to such Philhellenes as Gladstone, Dilke, Salisbury, Campbell-Bannerman, and

Newbold, who fought for Greece in the war of 1897. Thanks to the author's praise of Salisbury's services to Greece at the Berlin Congress, the reviewer was able to persuade the present Governor of Athens to prevent the removal of Salisbury's name from an Athenian Street. The third section discusses 'Gladstone as economist,' 'the Eastern policy of Britain before and after the Berlin Congress,' 'Philip Snowden'—a lecture in which Yorkshiremen were described as 'the Cephalonians of England'—the centenary of Santarosa's death at Sphacteria, and the relations between Greece and Italy. There is a bibliography of the author's writings and of the articles published upon his death.

W. M.

Σύλλογος πρὸς διάδοσιν ὠφελίμων βιβλίων.  
Χρονικὰ τῆς τεσσαρακονταετίας 1899-1939.  
Pp. 141. Athens. 1940.

Founded by Bikelas in 1899 to help create a new Greece after the disastrous war of 1897, the 'Society for the Spread of Useful Books' has completed 40 years of work, described in this book by its perpetual secretary, the poet and novelist, Drosines. It has issued 100 'Useful Books,' beginning with 1900, three children's books, 74 'Green Books,' including a translation of Baden-Powell's book on boy-scouts in 1910, which led to the formation of that movement in Greece, now merged in the *Νεολαία*, thirteen 'National Publications,' thirteen numbers of an 'Historical and Folk-lore Library,' and the Magazine of modern Balkan and Greek History, *Ἑλληνικά*. It has thus popularised knowledge for the Greeks, though the last European war interrupted its publications, owing to the lack of paper. It also planted wild-olive trees from Olympia round the Athenian stadium to provide crowns for the victors. But the Stadium has witnessed no Olympic Games since 1906. The book contains eight illustrations, including a portrait of Bikelas, to whose memory it is dedicated, while the Society will erect his bust at his birthplace, Berrhoea.

W. M.

<sup>1</sup> *JHS* lviii, 292: lix, 5.



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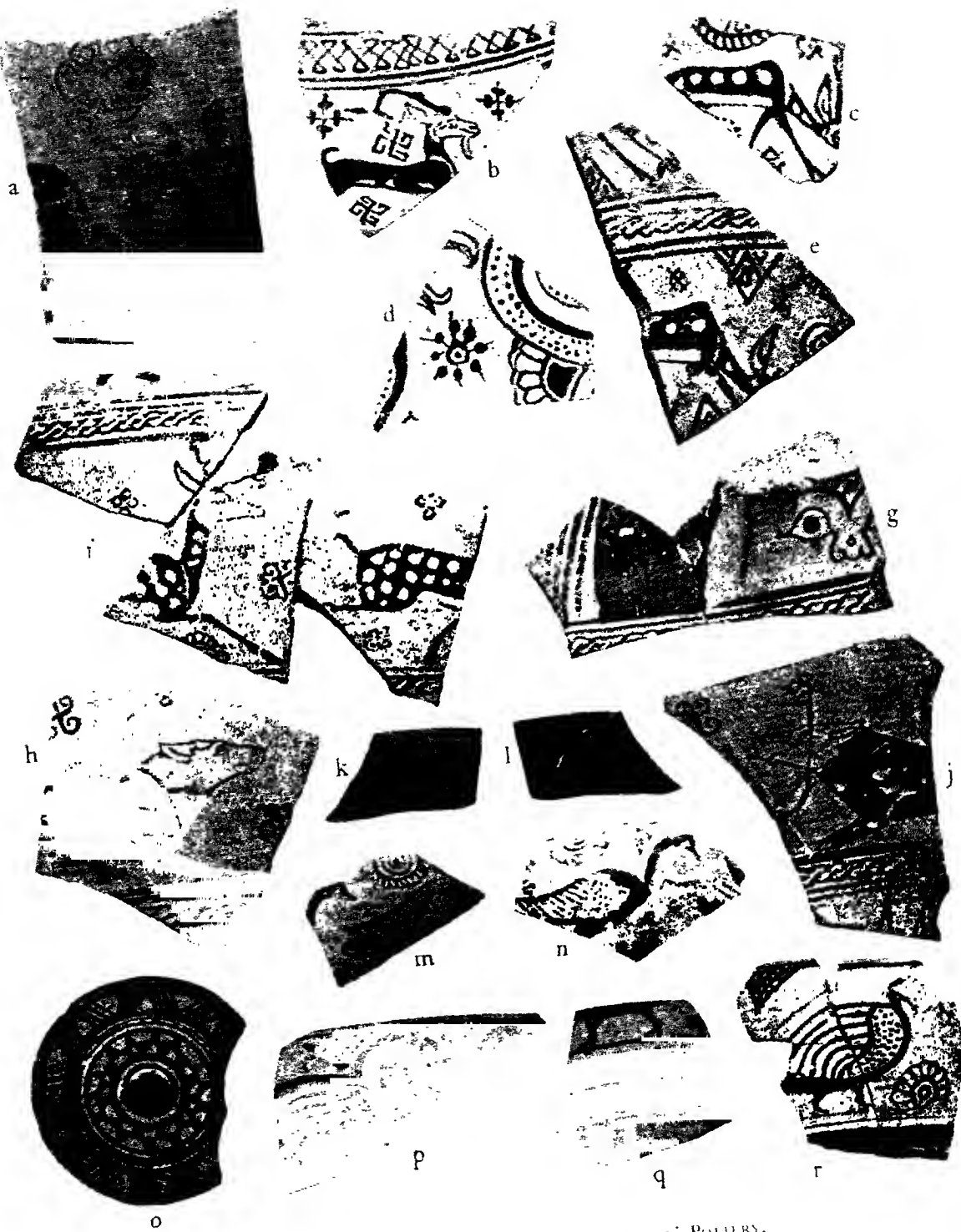
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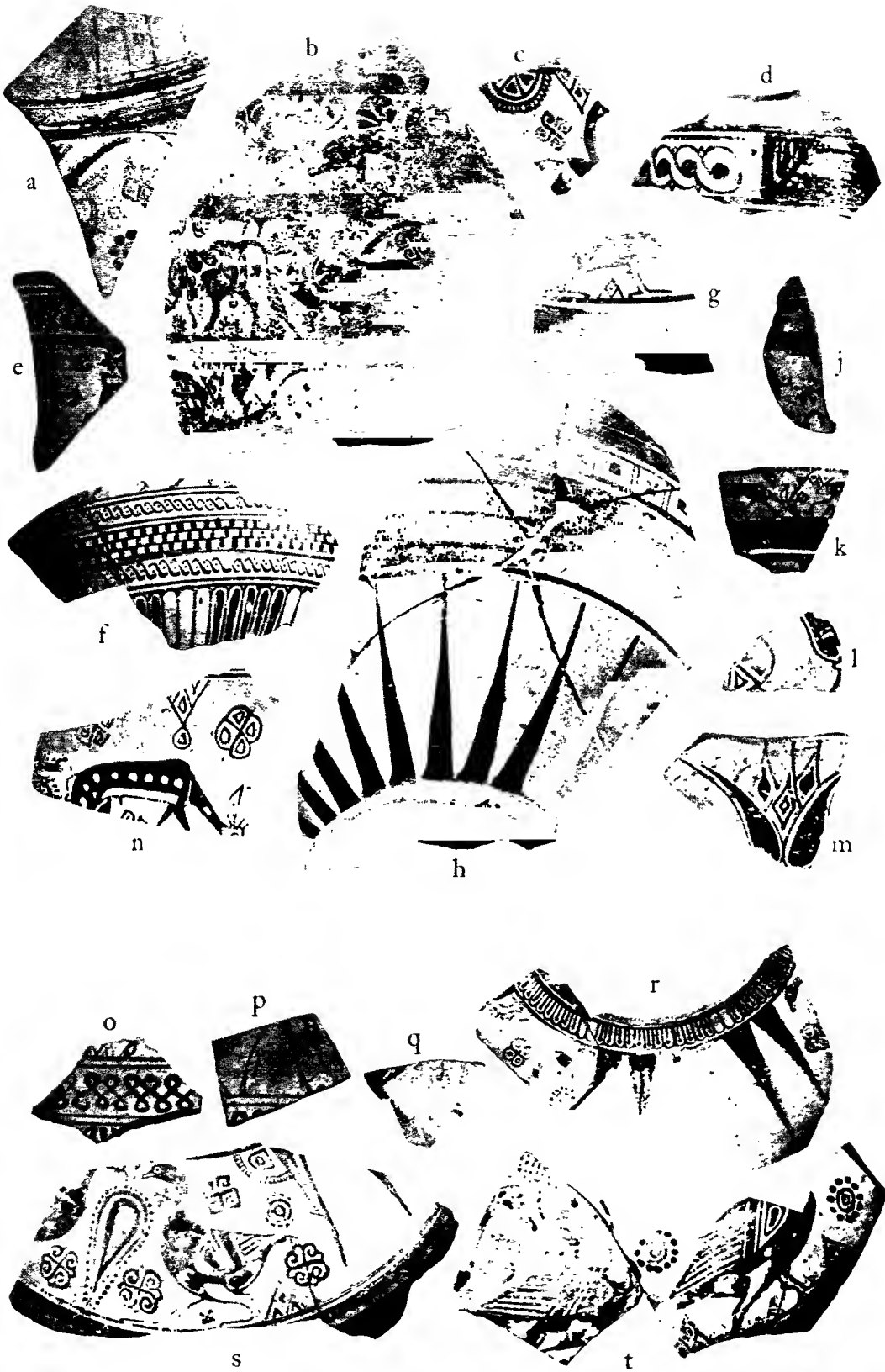
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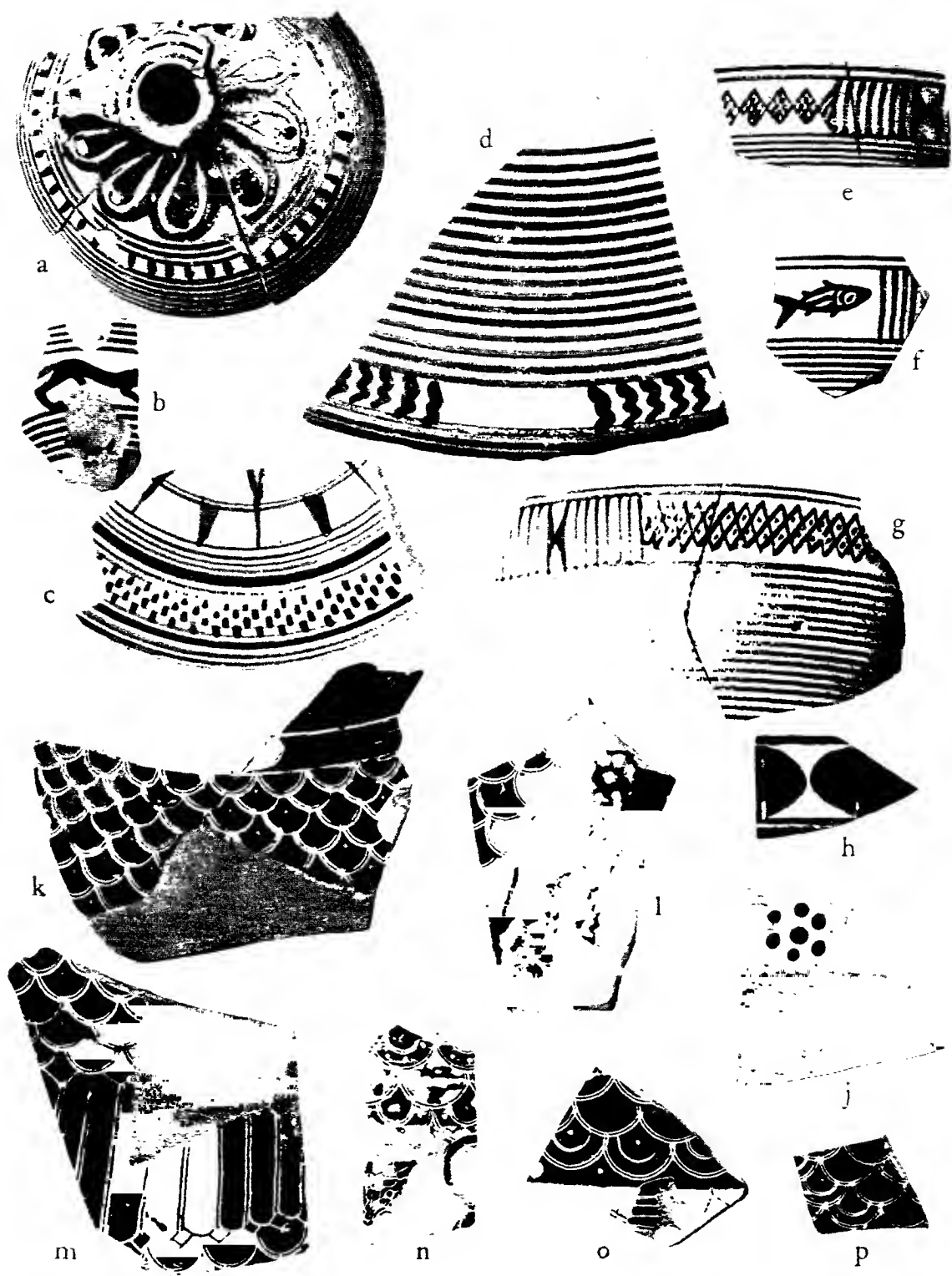




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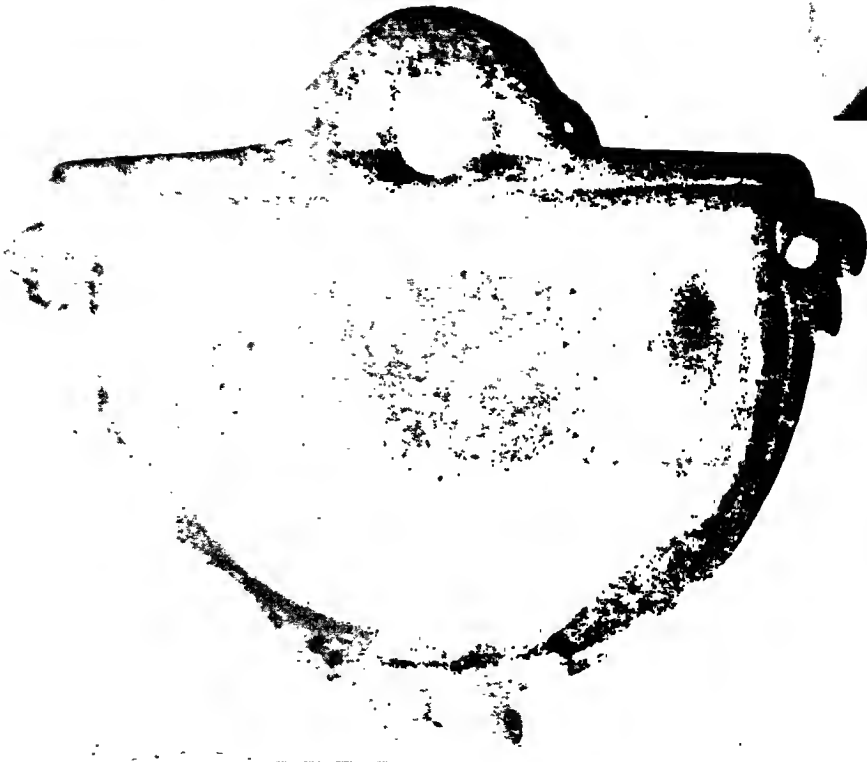






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## REPORT FOR THE SESSION 1939-40.

THE Council beg leave to submit their report for the session now concluded:—

### Finance.

The Accounts for the year 1939, though this includes four months of war, show a satisfactory credit balance of £252 16s. 10d. In spite also of an inevitable number of resignations, especially among Student-Associates who have joined H.M. Forces, members' subscriptions have reached a normal level during the past session: ordinary membership, as compared with the previous year's total, being down by only 14. The number of subscribing Libraries has even increased, but many of those situated on the Continent will of course temporarily discontinue their payments.

The following figures show the membership at June 1st for the last three years:—

	Members.	Life Members.	Student Associates.	Libraries.	Total.
1938	1,023	149	253	321	1,746
1939	1,008	144	241	328	1,721
1940	994	146	170	340	1,650

Against these encouraging items must be set the heavy loss of rent resulting from the vacation of the upper part of the Society's premises by the London Association of Certified Accountants, and the improbability of replacing them under present conditions. It is proposed to reduce the ensuing deficit by a number of economies such as the temporary suspension of the grant for the purchase of new books, and by cutting down the annual expenditure on the *Journal*, which shortage of paper would in any case render necessary. Volume LX is thus to appear in the autumn, reduced in bulk, as a single number. Such loss of income as may then remain will be met from our accumulated surplus.

### Obituary.

The Council have had to record with regret the following losses among members of the Society during the past session:—The Rev. A. E. Brooke, Mr. M. J. Calvocoressi, Lieut.-Col. Sir Hugh Daly, Mr. Har Dayal, Mr. George Eumorfopoulos, the Rev. D. J. Finn, the Rt. Hon. H. A. L. Fisher, Mr. F. W. G. Foat, Prof.

E. A. Gardner, Dr. J. D. Gilruth, Sir Thomas Heath, Sir Henry Stuart Jones, Miss M. E. H. Lloyd, Mr. D. C. Macgregor, Miss G. E. Miller, Mr. A. E. Pearman, Mr. T. E. Pickering, Prof. J. A. Smith, and Mr. E. L. Vaughan.

### Administration.

The Council have recently had the pleasure of electing Dr. R. W. Macan as an Honorary Member of the Society.

The following Members of Council retire under Rule 19: Miss M. Alford, Mr. R. P. Austin, Miss J. R. Bacon, Dr. C. M. Bowra, Prof. F. R. Earp, Mr. N. G. L. Hammond, Mr. R. P. Hinks, Prof. H. M. Last, Prof. F. H. Marshall and Mr. L. P. Wilkinson.

The Council have nominated for election as members of their body for the next three years: the Rev. M. P. Charlesworth, Mr. R. H. Dundas, Dr. Joan Evans, Mr. W. K. C. Guthrie, Mr. R. J. H. Jenkins, Miss C. M. Knight, Mr. H. C. Oakley, Prof. H. A. Ormerod, Mr. E. S. G. Robinson and Mr. A. P. Sinker.

The Council have accepted with regret the resignation of Lady Evans, Prof. H. M. Last and Mr. L. P. Wilkinson from their body owing to the impossibility of attending meetings in London. Most of the newly nominated members have notified the Council that their attendance will probably be irregular for some time to come.

The Council have pleasure in announcing that Dr. H. I. Bell has been elected to the Standing Committee in place of Prof. F. H. Marshall, who retires by rotation.

The Council again thank Mr. C. F. Clay and Mr. W. E. F. Macmillan for acting as Auditors. They learned with regret of Mr. Clay's intention to resign, after much valued service on their behalf. They have pleasure in appointing Mr. C. T. Edge, F.C.A., in his place, and in nominating Mr. Macmillan for re-election.

The Council record with regret the retirement of Prof. A. T. Trendall from the Editorship of the *Journal* on his acceptance of the Chair of Greek at the University of Sydney. The second part of Vol. LIX was published under the direction of Mr. D. E. L. Haynes, who was appointed to succeed him. The Council also regret Mr. A. S. F. Gow's retirement from the

Acting Editorial Committee. They welcome Prof. Ashmole in his place.

The Council desire to record their regret at the resignation of Mr. W. T. Purdon from the post of Librarian, which he has held with such efficiency and devotion during the past four years. He is succeeded by Miss G. R. Levy, with Miss J. E. Southan as Assistant Librarian.

The Index to Volumes XLIII to LX will probably form the bulk of volume LX of the *Journal*, which it is hoped to issue as a single part in the autumn of this year. The necessity for economy and the present paper restrictions have each contributed to this decision.

### Meetings.

The following communications have been made during the session:—

Nov. 30th. 1939. Prof. F. M. Cornford, at St. John's College, Cambridge, on 'A Ritual Basis for Hesiod's Theogony.'

Jan. 19th. 1940. Prof. J. D. Beazley, at the Ashmolean Museum, Oxford, on 'A Marble Lamp.'

May 7th. 1940. Prof. Bernard Ashmole, on 'An Early Attic Epiphany.'

June 25th. 1940. Sir Richard Livingstone Presidential Address, on 'The Contemporary Interest of the *Supplices* of Aeschylus.'

Summaries of the above communications, where available, will appear in the Society's *Journal*.

### The Joint Library.

The following figures show the work done during the last three sessions:—

	Library.		
	1937-8	1938-9	1939-40
Books added .....	405	537	377
Books borrowed...	4,741	4,453	3,058
Borrowers.....	603	702	551
Slide Collections, etc.			
Slides added .....	171	163	209
Slides borrowed ..	6,685	5,070	3,145
Slides sold .....	461	493	278
Photographs sold	85	150	149

It will be seen that the general falling off in numbers is less great than might be expected in the present circumstances.

The following are among the important additions made during the year:—*Δράμα* M. P. Nilsson *dedicatum*, *Anatolium Studies presented to W. H. Buckler*, the fifth volume of Tenney Frank's *Economic Survey of Ancient Rome*, Hawkes' *Prehistoric Foundations of Europe*, Syme's *Roman*

*Revolution*. Sir George Hill's *History of Cyprus* volume I. Parke's *History of the Delphic Oracle*, Sjoqvist's *Problems of the Late Cypriote Bronze Age*, and Argenti's *Bibliography of Chios*. Archaeology is richly represented by the first volumes of Schaeffer's *Ugaritica*, of Payne's *Perachora*, and of Kraiker and Kubler's *Kizameikos*, by Heurtley's *Prehistoric Macedonia*, Rostovtzeff's seventh and eighth Reports of the Dura-Europos excavations, and Calza's *La Necropoli del Porto di Roma nell' Isola Sacra*. Publications on the arts include Collignon's *Le Parthénon*, Schrader's *Die archaischen Marmorbildwerke der Akropolis*, L'Orange and von Gerkan's *Der Spätantike Bildschmuck des Constantinobogens*, and further fascicules of the *Corpus Vasorum Antiquorum*. Among outstanding works on religion is the third and final volume of Prof. A. B. Cook's *Zeus*. Epigraphy has some notable accessions, including Buckler and Calder's *Monuments and Documents from Phrygia and Caria*, the second volume of Jalabert and Mouterde's *Inscriptions grecques et latines de la Syrie*. There are also the very valuable Spranger reproduction of the *Euripides codex Parisinus Graecus* 2713, the *Adler Papyri*, the *Papyrus Fouad I*.

The following additional periodicals are now taken by the Library:—*Jaarbericht Ex Oriente Lux* Leiden; *La Critica d'Arte*, Epigraphica, *Kratkiya Soobshcheniya* (Leningrad), *Κυπριακά Σπουδαία*, and *περιοδικόν του ἐν Χίω Συλλόγου*.

Reciprocal loans arranged with the National Central Library, though inevitably diminished, continue to prove of mutual benefit. The Joint Library lent 48 books during the year and borrowed 44.

The Councils of the Hellenic and Roman Societies wish to express their thanks for gifts of books from the following:—

*Authors*: Dr. A. Adriani, Dr. C. Albrecht, Prof. J. D. Beazley, Dr. Herbert Bloch, Prof. G. I. Bratianu, Sister K. Brazzel, Prof. I. Cazzaniga, Signor G. A. Colonna di Cesarò, Dr. A. Cordier, Dr. A. C. Cosman, Dr. R. E. Deutsch, Prof. W. B. Dinsmoor, Dr. G. Downey, Dr. V. Ehrenberg, Dr. C. C. Van Essen, Prof. G. Ferrari dalle Spade, Mr. T. Fitzhugh, Sister M. M. Fox, Mr. A. E. Gordon, Dr. D. C. Hesselring, Dr. J. N. Hritz, Prof. A. D. Keramopoulos, Dr. H. MacLennan, Dr. M. Marconi, Mr. H. Mattingly, Prof. G. Méautis, Dr. J. G. Milne, Dr. S. Nittis, Prof. A. D. Nock, Dr. D. Norberg, Dr. M. N. P. Packer, Mr. F. Peeters, Prof. Dr. F. Poulsen, Mr. F. N. Pryce, Mr. L. J. D. Richardson, Prof. C. A. Robinson, Mr. H. T. Rowell, Dr. C. F. A. Schaeffer, Mr. I. Silver, Dr. E. Sjoqvist, Mr. J. A. Spranger, Prof. L. A. Stella, Mrs. E. Strong, Miss M. V. Taylor, Prof. H. J. W. Tillyard, Dr. N. Valmin, Dr. A. Vakalopoulos, Prof. K. I. Vourveris,

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*The Presses of the following Universities :* Aberdeen, Cambridge, Chicago, Illinois, Johns Hopkins, Manchester, Michigan, Oxford, Wisconsin, Yale.

*Institutions and Associations :* American Academy in Rome, American Philological Association, American Philosophical Society (Philadelphia), American School of Classical Studies (Athens), Bayerische Akademie der Wissenschaften, Bibliothèque universitaire de Lille, Cyprus Committee, Deutsch-Ausländischer Buchtausch, Fondation Égyptologique Reine Élisabeth (Brussels), Government of Cyprus

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As before, the two Councils have to record their grateful appreciation of the help given by Mrs. Culley in dealing with accessions of books until war duties took her from London, and by Miss Alford in recording the incoming periodicals.

The thanks of the Councils are due to Mr. A. W. Lawrence and Mr. W. T. Purdon for gifts to the photographic department.

# The Society for the Promotion of Hellenic Studies

BALANCE SHEET, DECEMBER 31, 1930.

[illegible]

Examined and found correct.

(Signed) C. F. CLAY.

W. E. F. MACMILLAN.

INCOME AND EXPENDITURE ACCOUNT. FROM JANUARY 1, 1930, TO DECEMBER 31, 1930.

<i>Expenditure.</i>	<i>t.</i>	<i>s.</i>	<i>d.</i>	<i>f.</i>	<i>c.</i>	<i>d.</i>	<i>Income.</i>	<i>£</i>	<i>s.</i>	<i>d.</i>	<i>£</i>	<i>s.</i>	<i>d.</i>	<i>Total Balance.</i>
To Salaries.....				509	5	0	By Members' Subscriptions—							
" Pension Insurance .....				32	16	9	Arrears .....	8	8	0				
" Miscellaneous Expenses .....				57	17	1½	1939 .....	1128	1	0				
" Stationery .....				31	0	6¼					1130	12	0	
" Postage .....				40	0	8	Members' Entrance Fees .....				17	17	0	
" Sundry Printing, Rules, List of Members, Notices, &c.....				17	11	7	Student Associates' Subscriptions .....				114	19	6	
" Heating, Lighting, Cleaning, Maintenance of Library Premises, &c. ....				310	19	6½	Libraries' Subscriptions—							
" Insurance .....				24	0	11	Arrears .....	3	3	0				
" Grants—							1939 .....	337	0	8				
British School at Athens .....	75	0	0				Life Compositions brought into Revenue Account ... .. .				340	3	8	
" " Rome .....	5	5	0				Dividends on Investments .....				105	0	0	
" "				80	5	0	Contributed by the Society for Promotion of Roman Studies .....				122	17	2	
" Balance from 'Journal of Hellenic Studies' Account .....				716	11	5	Sale of 'Ante Oculos' .....				275	0	0	
" Balance from Library Account .....				118	1	7	Sale of 'Artemis Orthia' .....				3	5	8	
" "							Miscellaneous Receipts .....				4	15	4½	
" "							Donations towards current expenses .....				3	3	1	
" "							Balance from Lantern Slides and Photo- graphs Account .....				11	10	2	
" "							Balance from Library Premises Account ..				103	0	1	
" Balance .....				272	16	10								
				£244	0	5½					£244	6	5½	

Dr. ' JOURNAL OF HELLENIC STUDIES ' ACCOUNT. From JANUARY 1, 1930, TO DECEMBER 31, 1930. Cr.

	£	s.	d.		£	s.	d.
To Printing and Paper. Vol. LIX.....	57	0	17	By Sales, including back Vols.			
" Plates.....	20	1	1	Per Macmillan & Co., Ltd. ....	102	3	9
" Drawing and Engraving .....	97	2	3	" Hellenic Society .....	91	12	6
" Editing and Reviews .....	86	11	6				
" Packing, Addressing, and Carriage to Members .....	151	0	0	" Receipts from Advertisements .....			103 16 3
				Balance to Income and Expenditure Account ...			33 8 0
							716 11 5
							<u>£943 15 8</u>

LANTERN SLIDES AND PHOTOGRAPHS ACCOUNT. From JANUARY 1, 1930, TO DECEMBER 31, 1930

	£	s.	d.		£	s.	d.
To Slides and Photographs for Sale.....	10	14	7	By Receipts from Sales and Hire.....			42 8 11
" Slides for Hire .....	8	12	8	" " Sale of Catalogues, &c.....			8 6
" Balance to Income and Expenditure Account .....	11	10	2				<u>£42 17 5</u>

LIBRARY ACCOUNT. PURCHASES AND BINDING. From JANUARY 1, 1930, TO DECEMBER 31, 1930.

	£	s.	d.		£	s.	d.
To Purchases .....	61	16	2	By Receipts from Sales of Catalogues, Duplicates, &c. ....			10 15 0
" Binding .....	41	0	2	" Balance to Income and Expenditure Account .....			118 1 7
" Cost of printing Accessions Lists to the Library and Slides Departments, less contribution from the Roman Society .....	32	0	3				<u>£137 10 7</u>

LIBRARY PREMISES ACCOUNT FOR THE YEAR 1930.

	£	s.	d.		£	s.	d.
Rent .....	405	5	0	Contributions by the B.S.A. and B.S.R. ....			20 0 0
Rates .....	138	11	11	London Association of Certified Accountants .....			650 0 0
Transferred from Balance Sheet—Proportion of Expendi- ture for Year .....	23	0	0				
Balance to Income and Expenditure Account .....	103	0	1				<u>£670 0 0</u>

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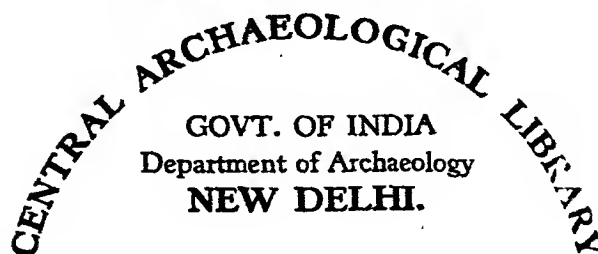
**Author—**

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*The Journal of  
Hellenic Studies*

Borrower No.	Date of Issue	Date of Return
K. S. Rang Chandran	11/6/77	17/6/77

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